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     2
                 BEILSTEIN: Reload and Implementation of a New Subject Area
         Apr 09
NEWS
     3
         Apr 09
                 ZDB will be removed from STN
NEWS
         Apr 19
                US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 5
         Apr 22
                 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 6
         Apr 22
                 BIOSIS Gene Names now available in TOXCENTER
NEWS
     7
NEWS 8
         Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS 9
         Jun 03 New e-mail delivery for search results now available
NEWS 10
         Jun 10
                MEDLINE Reload
NEWS 11
         Jun 10
                 PCTFULL has been reloaded
                 FOREGE no longer contains STANDARDS file segment
NEWS 12
         Jul 02
NEWS 13
                 USAN to be reloaded July 28, 2002;
         Jul 22
                 saved answer sets no longer valid
NEWS 14
         Jul 29
                 Enhanced polymer searching in REGISTRY
NEWS 15
         Jul 30
                NETFIRST to be removed from STN
NEWS 16
         Aug 08
                 CANCERLIT reload
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         Aug 08
                 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
         Aug 08
                 NTIS has been reloaded and enhanced
NEWS 19
         Aug 19
                 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
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         Aug 19
NEWS 21
         Aug 19
                 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22
         Aug 26
                 Sequence searching in REGISTRY enhanced
NEWS 23
         Sep 03
                 JAPIO has been reloaded and enhanced
NEWS 24
         Sep 16
                 Experimental properties added to the REGISTRY file
NEWS 25
         Sep 16
                 Indexing added to some pre-1967 records in CA/CAPLUS
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         Sep 16
                 CA Section Thesaurus available in CAPLUS and CA
NEWS 27
         Oct 01
                 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28
        Oct 21
                 EVENTLINE has been reloaded
NEWS 29
        Oct 24
                 BEILSTEIN adds new search fields
NEWS 30
        Oct 24
                 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 31
         Oct 25
                 MEDLINE SDI run of October 8, 2002
NEWS 32
         Nov 18
                DKILIT has been renamed APOLLIT
NEWS EXPRESS
             October 14 CURRENT WINDOWS VERSION IS V6.01,
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
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=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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=> Uploading 10021667.str

L1 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 18:07:48 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 993 TO ITERATE

100.0% PROCESSED 993 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

6 TO

PROJECTED ITERATIONS:

17970 TO 21750

266

PROJECTED ANSWERS:

L2 6 SEA SSS SAM L1

=> d scan

L2 6 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[6-(4-acetyl-3-hydroxy-2-propylphenyl)hexyl]oxy]-3,4-dihydro- (9CI)

MF C29 H36 O7

$$Ac$$
 $Pr-n$ 
 $Ac$ 
 $OH$ 
 $CO_2H$ 

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 6 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[2-(4-phenoxy-2-propylphenoxy)ethoxy] - (9CI)

MF C29 H32 O6

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 6 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-

propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI)

MF C28 H34 O8

CI COM

$$n-Pr$$
HO
 $CO_2H$ 
AC
 $AC$ 

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

# HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 6 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3hydroxyphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI)

MF C26 H32 O7

Ac 
$$OH$$
  $O-(CH_2)_5-O$   $O-CO_2H$ 

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 6 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-4-oxo-8-propyl-7-[[5-(2-propylphenoxy)pentyl]oxy]- (9CI)

MF C27 H34 O6

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

## HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 6 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4[(methylamino)carbonyl]phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI)

MF C29 H37 N O7

MeNH-C OMe
$$CH_2 \longrightarrow 0$$

$$O \cap CO_2H$$

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

## ALL ANSWERS HAVE BEEN SCANNED

=> log y COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

1.90 2.11

STN INTERNATIONAL LOGOFF AT 18:10:23 ON 19 NOV 2002

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        Apr 19
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                 BIOSIS Gene Names now available in TOXCENTER
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        Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS
        Apr 22
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                 New e-mail delivery for search results now available
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        Jun 10
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        Jul 22
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        Jul 29
                 Enhanced polymer searching in REGISTRY
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        Jul 30
                NETFIRST to be removed from STN
NEWS 16
        Aug 08
                 CANCERLIT reload
NEWS 17
        Aug 08
                 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
                NTIS has been reloaded and enhanced
        Aug 08
NEWS 19
                Aquatic Toxicity Information Retrieval (AQUIRE)
        Aug 19
                 now available on STN
NEWS 20
        Aug 19
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
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NEWS 21
        Aug 19
                 Sequence searching in REGISTRY enhanced
NEWS 22
        Aug 26
NEWS 23
        Sep 03
                 JAPIO has been reloaded and enhanced
        Sep 16 Experimental properties added to the REGISTRY file
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                Indexing added to some pre-1967 records in CA/CAPLUS
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NEWS 27
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                EVENTLINE has been reloaded
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=> file reg

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.21 0.21

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TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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=> s 11

SAMPLE SEARCH INITIATED 18:12:48 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 96 TO ITERATE

100.0% PROCESSED 96 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1333 TO 2507

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 18:12:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - '1431 TO ITERATE

100.0% PROCESSED 1431 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.04

L3 0 SEA SSS FUL L1

=> log y COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 140.28 140.49

STN INTERNATIONAL LOGOFF AT 18:13:14 ON 19 NOV 2002

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         Jul 02
NEWS 13
         Jul 22 USAN to be reloaded July 28, 2002;
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                 NTIS has been reloaded and enhanced
         Aug 08
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         Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
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         Aug 19
NEWS 21
         Aug 19
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         Aug 26
                 Sequence searching in REGISTRY enhanced
NEWS 23
         Sep 03
                 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25
        Sep 16
                 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28 Oct 21 EVENTLINE has been reloaded
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L1 STRUCTURE UPLOADED

=> s l1 ful

FULL SEARCH INITIATED 18:15:57 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 19805 TO ITERATE

100.0% PROCESSED 19805 ITERATIONS 155 ANSWERS

SEARCH TIME: 00.00.03

L2 155 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 140.28 140.49

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FILE COVERS 1907 - 19 Nov 2002 VOL 137 ISS 21 FILE LAST UPDATED: 18 Nov 2002 (20021118/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 12

L3 101 L2

=> d 13 ibib hitstr abs 70-101

L3 ANSWER 70 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:414418 CAPLUS

DOCUMENT NUMBER: 117:14418

TITLE: Antiallergic compositions containing

platelet-activating factor antagonists and leukotriene

D4 antagonists

INVENTOR(S): O'Donnell, Margaret; Welton, Ann PATENT ASSIGNEE(S): Hoffmann-La Roche, F., A.-G., Switz.

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT NO.	KIN	D DATE	A	PPLICATIO	N NO. DATE
EP	469477	A1	1992020	5 E	P 1991-112	2577 19910726
EP	469477	B1	1995092	0		
	R: AT,	BE, CH,	DE, DK, FI	, GB, IT,	LI, LU, 1	NL, SE
AT	128030	E	1995101	.5 A'	Г 1991-11;	2577 19910726
CA	2048236	AA	1992020	3 C	A 1991-20	48236 19910731
zA	9106036	A	1992052	7 Z	A 1991-603	36 19910731
AU	9181535	A1	1992021	.3 AI	J 1991-81	535 19910801
AU	651358	B2	1994072	1		
JP	04244028	A2	1992090	1 J	P 1991-21	5009 19910801
US	5227378	A	. 1993071	.3 U	S 1992-848	8564 19920309
PRIORITY	APPLN.	INFO.:		US 1:	990-561743	3 19900802
				<b>-</b>		

IT 96566-25-5D, mixts. with platelet-activating factor antagonists
140667-06-7

RL: BIOL (Biological study)

(antiallergic compns. contg.)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 140667-06-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, mixt. with 5-[3-[5-(2-chlorophenyl)-5,6-dihydro-9-methyl-4H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]-2-propynyl]-6(5H)-phenanthridinone (9CI) (CA INDEX NAME)

CM 1

CRN 140634-85-1 CMF C31 H22 Cl N5 O S

$$\begin{array}{c|c} & \text{Me} & \text{N} \\ \hline & \text{N} & \text{CH}_2\text{-}\text{C} \end{array}$$

CM 2

CRN 96566-25-5 CMF C28 H34 O8

$$n-Pr$$
HO
 $CO_2H$ 
Ac
 $CO_2H$ 

AB A synergistic combination of platelet activating factor (PAF) antagonists with leukotriene D4 (LTD4) antagonists provides protection against allergic reactions, such as antigen-induced death. Guinea pigs were sensitized with an i.p. injection of ovalbumin in a saline soln. and administered with a combination of 5-[3-[4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f]1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]-2-propynyl]phenanthridin-6(5H)-one (I) (PAF antagonist) and (E)-4-[3-[2-(4-cyclobutyl-2-thiazolyl)ethenyl]phenylamino]-2,2-diethyl-4-oxobutanoic acid (II) (LTD4 antagonist) at 1 mg/kg each before challenge with antigen; a survival rate from anaphylactic death at 120 min was 100

\$ , compared to 0 \$ for groups administered with I or II alone. Formulations contg. I and II combinations are given.

L3 ANSWER 71 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:262600 CAPLUS

DOCUMENT NUMBER: 116:262600

TITLE: Drug matrix effect on the determination of residual

solvents in bulk pharmaceuticals by wide-bore

capillary gas chromatography

AUTHOR(S): Kersten, Brian S.

CORPORATE SOURCE: Searle Res. Dev., Skokie, IL, 60077, USA

SOURCE: Journal of Chromatographic Science (1992), 30(4),

115-19

CODEN: JCHSBZ; ISSN: 0021-9665

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5

RL: ANST (Analytical study)

(residual solvents detn. in, by wide-bore capillary gas chromatog.,

drug matrix effect on)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB A wide-bore capillary gas chromatog. method was developed to study the drug matrix effect on the detn. of residual solvents in bulk pharmaceuticals. A selective method is achieved on a Restek wide-bore (0.53-mm i.d. .times. 30 m) open-tubular fused-silica column coated with a 5-.mu.m film of 95% di-Me-5% di-Ph polysiloxane protected by a phenyl-Me siloxane deactivated, uncoated fused-silica guard column. Utilizing this method, several common process solvents in weakly acidic, weakly basic, and neutral drug matrixes are evaluated by recovery and linearity studies to show whether or not a drug matrix effect exists in their detn.

L3 ANSWER 72 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:214350 CAPLUS

DOCUMENT NUMBER: 116:214350

TITLE: Preparation of 3,4-dihydro-7-

[(carbamoylphenoxy)alkoxy]benzopyran-2-alkanoates and

analogs as LTB4 antagonists

INVENTOR(S): Djuric, Stevan Wakefield; Docter, Stephen Hermann; Yu,

Stella Siu Tzyy

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA SOURCE: PCT Int. Appl., 149 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9200011	A2	19920109	WO 1991-US4386	19910627
WO 9200011	A3	19920206		

W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, NL, NO, PL RW: AT, BE, BF, BJ, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, NL, SE, SN, TD, TG US 1990-545430 US 5124350 Α 19920623 19900628 AU 9185282 AU 1991-85282 19910627 Α1 19920123 JP 05507720 JP 1991-515594 19910627 T2 19931104 JP 2942630 B2 19990830 EP 593478 **A1** 19940427 EP 1991-916271 19910627 EP 593478 B1 19951206 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE AT 131165 AT 1991-916271 Ε 19951215 19910627 Т3 ES 2080334 ES 1991-916271 19960201 19910627 PRIORITY APPLN. INFO.: US 1990-545430 19900628 WO 1991-US4386 19910627 OTHER SOURCE(S): MARPAT 116:214350 120072-59-5P TT RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 120072-59-5 CAPLUS RNCN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

IT 141059-14-5P 141059-19-0P 141059-22-5P
141059-25-8P 141059-28-1P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as LTB4 antagonist)

RN 141059-14-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-[(methylamino)carbonyl]phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

MeNH-C 
$$CH_2$$
  $n-Pr$   $CO_2H$ 

RN 141059-19-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[(methylamino)carbonyl]-2-(2-propenyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeNH-C 
$$CH_2-CH=CH_2$$
  $n-Pr$   $O-(CH_2)_3-O$   $CO_2H$ 

RN 141059-22-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-(2-propenyl)-4-(1-pyrrolidinylcarbonyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

OME
$$CH_2-CH=CH_2 \quad n-Pr$$

$$O-(CH_2)_3-O$$

$$CO_2H$$

RN 141059-25-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(aminocarbonyl)-3-methoxy-2-(2-propenyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & OMe \\ H_2N-C & CH_2-CH=CH_2 & n-Pr \\ \hline O-(CH_2)_3-O & CO_2H \\ \end{array}$$

RN 141059-28-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[(methylamino)carbonyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeO 
$$O-(CH_2)_3-O$$
  $O-CO_2H$ 

GI

$$R^7 (CH_2)_{nO}$$
 OCHR $^9 (CH_2)_{pCO_2R^2}$ 

$$R^7 (CH_2)_3O$$
  $O$   $CH_2CH_2CO_2R^2$  III

AB Title compds. {I; R2 = H, alkyl; R6 = alkyl; R7 = carbamoylphenoxy group Q; R = alkyl, alkenyl, alkynyl, (CH2)mR3; R1 = alkyl; R3 = cycloalkyl; R4,R5 = H, alkyl; NR4R5 = heterocyclyl; R8, R9 = H; R8R9 = CH2CH2; m = 1,2; n = 3-7; p = 0-6] were prepd. Thus, benzopyranpropanoate II (R2 = Me, R7 = iodo) (prepn. given) was condensed with QH (R = allyl, R1 = R5 = H, R4 = Me) (prepn. given) to give II (R7 = Q, R = alkyl, R4 = Me, R5 = H) (III; R2 = Me, R1 = H) which was converted in 2 steps to III (R2 = H, R1 = The latter was 8.9 times as effective as 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid in inhibition of binding of LTB4 at human neutrophils in vitro.

Ι

ANSWER 73 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1992:145642 CAPLUS

DOCUMENT NUMBER:

116:145642

TITLE:

Induction of colitis in rats by 2,2'-azobis[2-

amidinopropane] dihydrochloride

AUTHOR(S):

Tamai, Hiroshi; Levin, Stuart; Gaginella, Timothy S.

CORPORATE SOURCE:

Searle Res. and Dev., Skokie, IL, 60077, USA

SOURCE:

Inflammation (New York, NY, United States) (1992),

16(1), 69-81

CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE:

Journal

LANGUAGE:

English

IT 120072-59-5, SC-41930

RL: BIOL (Biological study)

(azobis (amidinopropane) - induced colitis prevention by)

RN120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB 2,2'-Azobis[2-amidinopropane] dihydrochloride (AAPH), an azo compd. that generates free radicals in vitro, was administered intrarectally to rats. Acute mucosal injury was assessed histol. by light microscopy and biochem. by myeloperoxidase (MPO) activity. Intrarectal administration of AAPH (60, 90, and 150 mg/kg) caused erythema, edema, and histol. verifiable mucosal inflammation. MPO activity was increased 9-18-fold above the control level. The levels of thiobarbituric acid reactants and sulfhydryls were significantly increased and decreased, resp., by 90 mg/kg AAPH. Sulfasalazine, 5-aminosalicylic acid, the LTB4 receptor antagonist SC 41930, and the antioxidant glutathione prevented the inflammation. This model of mucosal inflammation may be useful in evaluating new therapeutic agents for the treatment of inflammatory bowel disease.

ANSWER 74 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:120578 CAPLUS

DOCUMENT NUMBER:

116:120578

TITLE:

Multiple actions of the leukotriene B4 receptor

antagonist SC-41930

AUTHOR (S):

Villani-Price, D.; Yang, D. C.; Walsh, R. E.;

Fretland, D. J.; Keith, R. H.; Kocan, G.; Kachur, J.

F.; Gaginella, T. S.; Tsai, B. S.

CORPORATE SOURCE:

Searle Res. and Dev., Skokie, IL, 60077, USA

SOURCE:

Journal of Pharmacology and Experimental Therapeutics

(1992), 260(1), 187-91

CODEN: JPETAB; ISSN: 0022-3565

DOCUMENT TYPE:

Journal

LANGUAGE:

English

IT 120072-59-5, SC 41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inflammation inhibition by, mechanism of)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GΙ

AB SC-41930 (I), a leukotriene B4 (LTB4) receptor antagonist with anti-inflammatory activity in animal models of colitis, was evaluated for effects on superoxide, LTB4 and prostaglandin E2 prodn. SC-41930 inhibited human neutrophil (PMN) superoxide generation maximally stimulated by f-Met-Leu-Phe (IC50 4 .mu.M) and C5a (IC50 .apprx.12 .mu.M). Moreover, postreceptor stimulation of superoxide prodn. by NaF (a G protein activator), but not by phorbol myristate acetate, was significantly inhibited by SC-41930, indicating that SC-41930 may act via

attenuation of a G protein-mediated signal transduction. SC-41930 also inhibited A23187-stimulated LTB4 prodn. (IC50 5.3 .mu.M) in human PMN as well as LTB4 (IC50 2.1 .mu.M) and prostaglandin E2 (IC50 2.9 .mu.M) prodn. in HL-60 cells. When coinjected intradermally (400 .mu.g/site), SC-41930 inhibited A23187-stimulated increases in LTB4 levels in guinea pig skin. SC-41930 inhibited human synovial phospholipase A2 (IC50 72 .mu.M), A23187-stimulated 5-hydroxyeicosatetraenoic acid prodn. in human PMN (IC50 8.5 .mu.M), and rat peritoneal leukotriene A4 hydrolase (IC50 20 .mu.M), but not ram seminal vesicle cyclooxygenase. The results suggest that the anti-inflammatory activity of SC-41930 could be attributed to postreceptor inhibition of inflammatory mediator prodn. by PMN and other cells in addn. to antagonism of PMN LTB4 receptors.

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L3 ANSWER 75 OF 101 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1992:83676 CAPLUS
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DOCUMENT NUMBER: 116:83676

TITLE: Preparation of heterocycles containing

alkoxy-substituted dihydrobenzopyran-2-carboxylic

acids as leukotriene B4 (LTB4) antagonists

INVENTOR(S): Djuric, Stevan Wakefield; Penning, Thomas Dale;

Snyder, James Patrick

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA

SOURCE: PCT Int. Appl., 90 pp.

(prepn. of, as LTB4 antagonist)

138828-24-7 CAPLUS

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

RN

```
PATENT NO.
                                           APPLICATION NO. DATE
                   KIND DATE
                      A1 19911114 WO 1991-US2981
     WO 9117160
                                                              19910501

W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, PL, RO, SD, SE, SU, US
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG

                                       US 1990-521777
     US 5073562
                      A 19911217
                                                              19900510
                       AA
                                            CA 1991-2082500 19910501
     CA 2082500
                            19911111
                                            AU 1991-79020
                                                              19910501
     AU 9179020
                       A1 19911127
                      B2
     AU 647487
                            19940324
                      A1
                           19930224
     EP 527922
                                           EP 1991-910026
                                                              19910501
     EP 527922
                      B1 19950308
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     JP 05507084 T2 19931014 JP 1991-509388 19910501
     ES 2069295
                      T3 19950501
                                            ES 1991-910026
                                                            19910501
                                            IL 1991-98090
     IL 98090
                      A1 19950731
                                                              19910509
     ZA 9103546
                      A 19920729
                                            ZA 1991-3546
                                                              19910510
     US 5192782
                      A 19930309
                                            US 1991-759272
                                                              19910913
     US 5212198
                       A 19930518
                                            US 1992-958632 19921009
PRIORITY APPLN. INFO.:
                                         US 1990-521777 19900510
                                                             19910501
                                         WO 1991-US2981
                                         US 1991-759272
                                                             19910913
OTHER SOURCE(S):
                         MARPAT 116:83676
     138828-24-7P 138828-27-0P 138828-28-1P
     138828-29-2P 138828-31-6P 138828-33-8P
     138828-36-1P 138828-39-4P 138828-42-9P
     138828-44-1P 138828-46-3P 138828-47-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
```

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(4-oxazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-27-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-[(phenylmethyl)thio]-1H-imidazol-4-yl]-2-propylphenoxy]propoxy]-8-propyl-(9CI) (CA INDEX NAME)

$$Ph-CH_2-S$$
 $N$ 
 $MeO$ 
 $n-Pr$ 
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 

RN 138828-28-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[4-(1H-imidazol-4-yl)-3-methoxy-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H \\
N \\
N \\
MeO
\end{array}$$

$$\begin{array}{c}
n-Pr \\
O-(CH_2)_3-O
\end{array}$$

$$\begin{array}{c}
CO_2H \\
O-(CH_2)_3-O
\end{array}$$

RN 138828-29-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(2-amino-4-thiazolyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$H_2N$$
 $N$ 
 $O-(CH_2)_3-O$ 
 $O-Pr$ 
 $O-Pr$ 
 $O-Pr$ 

RN 138828-31-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-(4-thiazolyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-33-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methyl-4-oxazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeO 
$$n-Pr$$
  $O-(CH_2)_3-O$   $O-CO_2H$ 

RN 138828-36-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-(2-propenyl)-4-(4-thiazolyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{N} & \text{O-} (\text{CH}_2)_3 - \text{O-} & \text{CO}_2\text{H} \\
\hline
\text{CH}_2 - \text{CH} = \text{CH}_2
\end{array}$$

RN 138828-39-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-42-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methoxy-4-thiazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeO 
$$N$$
  $O-(CH2)3-O  $O-CO2H$$ 

RN 138828-44-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(2,3-dihydro-2-thioxo-4-thiazolyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-46-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-(methylthio)-4-thiazolyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeS 
$$N$$
  $O-(CH_2)_3-O$   $O-Pr$   $O-CO_2H$   $N-Pr$ 

RN 138828-47-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-[(phenylmethyl)thio]-4-thiazolyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

GΙ

$$R^{10}$$
 $OCH_2 (CH_2)_{n}CH_2O$ 
 $OCH_2 (CH_2)_{p}CO_2R^2$ 

.

Title compds. I (R = C2-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, R3(CH2)m, wherein R3 = C3-5 cycloalkyl, m = 1,2; R1 = C1-4 alkyl; R2 = H, C1-5 alkyl; R4 = C1-6 alkyl; n = 1-5; p = 0-6; Y = NH, O, S; Z = H, C1-4 alkyl, C1-4 alkoxy, R5R4N wherein R4, R5 = H, C1-4 alkyl, R6S wherein R6 = H, PhCH2, C1-4 alkyl), stereoisomers and salts thereof, are prepd. I as LTB4 antagonists are useful as antiinflammatory agents and in treatment of LTB4-mediated conditions. The 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylate (prepn. given) was converted to the 2-hydroxy-1-oxoethyl deriv. which was treated with (F3CSO2)2O to give the 2-(trifluoromethylsulfonyloxy deriv. This compd. was stirred with HCONH2 and DMF to give I (R = R4 = Pr, R1 =

Ι

R2 = Me, Y = O, Z = H, n = 1, p = 0) which was stirred with LiOH to give I (R = R4 = Pr, R1 = Me, R2 = Z = H, Y = O, n = 1, p = 0) (II). II and other title compds. showed LTB4 antagonism.

L3 ANSWER 76 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:6555 CAPLUS

DOCUMENT NUMBER: 116:6555

TITLE: Preparation of [(azolylphenoxy)alkoxy]benzopyrancarbox

ylates as antiinflammatories

INVENTOR(S): Djuric, Stevan W.; Penning, Thomas D.

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA

SOURCE: U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT 1	NO.	KIND DAT	Έ	APPLICATION NO.	DATE
	<b></b>				
US 5051	438	A 199	10924	US 1990-524765	19900516
CA 2083	040	AA 199	11117	CA 1991-2083040	19910503
WO 9117	989	A1 199	11128	WO 1991-US3068	19910503
W :	AT, AU,	, BB, BG, BF	, CA, CH,	DE, DK, ES, FI, C	B, HU, JP, KP, KR,
	LK, LU,	, MC, MG, MW	, NL, NO,	PL, RO, SD, SE, S	u, us
RW:	AT, BE,	, BF, BJ, CF	CG, CH,	CI, CM, DE, DK, E	S, FR, GA, GB, GR,
	IT, LU,	, ML, MR, NI	, SE, SN,	TD, TG	
AU 9178	925	A1 199	11210	AU 1991-78925	19910503
EP 5289	35	A1 199	30303	EP 1991-909729	19910503
EP 5289	35	B1 199	41019		
R:	AT, BE,	, CH, DE, DE	, ES, FR,	GB, GR, IT, LI, I	U, NL, SE
JP 0550	6440	T2 199	30922	JP 1991-509234	19910503
ES 2062	792	T3 199	41216	ES 1991-909729	19910503
PRIORITY APP	LN. INFO	o.:		US 1990-524765	19900516
				WO 1991-US3068	19910503

OTHER SOURCE(S): MARPAT 116:6555

IT 137837-12-8P 137856-08-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as antiinflammatory)

RN 137837-12-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-(1H-pyrazol-3-yl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

HN MeO 
$$n-Pr$$
  $O-(CH_2)_3-O$   $O-Pr$ 

RN 137856-08-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[4-(3-isoxazolyl)-3-methoxy-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

IT 120072-59-5P 137837-15-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as intermediate for antiinflammatory)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 137837-15-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-[3-(dimethylamino)-1-oxo-2-propenyl]-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$Me_{2}N-CH = CH-C$$

$$0-(CH_{2})_{3}-0$$

$$0-CO_{2}H$$

GΙ

$$\mathbb{R}^{10}$$
  $\mathbb{C}^{0}$   $\mathbb{C}^{0}$ 

$$\begin{array}{c|c} & \text{Pr} & \text{O} & \text{Pr} \\ & \text{O} & \text{O} & \text{CO}_2 \text{H} \\ & \text{O} & \text{N} & \text{O} & \text{O} \end{array}$$

Title compds. (I; R = alkyl, alkenyl, alkynyl, cycloalkylalkyl; R1, R4 = AΒ alkyl; R2 = H, alkyl; Y = NH, O; n = 1-5), were prepd. Thus, Me 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylate was O-methylated with MeI/K2CO3 in acetone. The product was condensed with Me2NCH(OMe)2 in DMF and the enaminone product was refluxed with H2NOH.HCl in MeOH/H2O to give, after sapon., title compd. II. II antagonized LTB4-induced chemotaxis of human neutrophils with 0.25 of the potency of 7-[3-(4-acetyl-3-methoxy-2propylphenoxy) propoxy] -3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid.

ANSWER 77 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1992:721 CAPLUS

DOCUMENT NUMBER:

116:721

TITLE:

Pheroxypentyloxy-3,4-dihydro-2H-1-benzopyran

derivatives for treatment of leukotriene-induced

Ι

II

inflammation of the intestinal mucosa Hoffmann-La Roche, F. A.-G., Switz.

PATENT ASSIGNEE(S):

Austrian, 20 pp.

SOURCE:

CODEN: AUXXAK

DOCUMENT TYPE:

Patent

German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AT 392902	В	19910710	AT 1987-2643	19871008
AT 8702643	Α	19901215		
OTHER SOURCE(S):	MA	RPAT 116:721		

IT 96566-25-5 131147-29-0 131147-29-0D, esters

RL: BIOL (Biological study)

(leukotriene-induced intestinal mucosa inflammation treatment with)

RN96566-25-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-CN propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

HO 
$$O$$
  $CO_2H$  Ac

RN 131147-29-0 CAPLUS RN 131147-29-0 CAPLUS

AB The title compds., esp. racemic 6-acetyl-7-[5-(4-acetyl-3-hydroxy-2-propylphenyloxy)pentyloxy]-3,4-dihydro-2H-1-benzopyran-2-carbonic acid (I), are prepd. as oral, rectal, or parenteral formulations. I at 10-100 mg/kg orally was effective against clindamycin-induced colitis in hamsters.

L3 ANSWER 78 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:654087 CAPLUS

DOCUMENT NUMBER:

115:254087

TITLE:

Effects of two leukotriene B4 (LTB4) receptor

antagonists (LY255283 and SC-41930) on LTB4-induced human neutrophil adhesion and superoxide production

AUTHOR(S): Schultz, R. M.; Marder, P.; Spaethe, S. M.; Herron, D. K.; Sofia, M. J.

CORPORATE SOURCE:

Lilly Res. Lab.; Indianapolis, IN, 46285, USA

SOURCE:

Prostaglandins, Leukotrienes and Essential Fatty Acids

(1991), 43(4), 267-71

CODEN: PLEAEU; ISSN: 0952-3278

DOCUMENT TYPE:

Journal English

LANGUAGE:

**120072-59-5**, SC 41930

RL: BIOL (Biological study)

(superoxide formation and adhesion by neutrophils response to)

RN 120072-59-5. CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-

propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

LTB4 induces a no. of functional changes in human neutrophils, including both superoxide release and CD11b/CD18 (Mo1)-mediated adherence to various substrates, such as keyhole limpet hemocyanin (KLH). These effects are both time- and concn.-dependent. Neutrophil adhesion was at least 10-fold more sensitive to the stimulatory action of LTB4 than superoxide prodn. Two LTB4 receptor antagonists, LY255283 and the sodium salt of SC-41930 were evaluated for effects on human neutrophil superoxide prodn. and adhesion. Despite being more sensitive to LTB4-induced stimulation, neutrophil adhesion was at least 100-fold less sensitive to inhibition by LY255283 and SC-41930 than superoxide prodn. Both LTB4 receptor antagonists behaved similarly in these models. These compds. did not inhibit neutrophil responses induced by granulocyte/macrophage colony-stimulating factor (GM-CSF).

L3 ANSWER 79 OF 101 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:597978 CAPLUS

DOCUMENT NUMBER: 115:197978

TITLE: The antiinflammatory agent SC-41930 inhibits

granulocyte infiltration of the rodent dermis induced

by 6-trans-leukotriene B4

AUTHOR(S): Fretland, D. J.; Widomski, D. L.; Anglin, C. P.;

Gaginella, T. S.

CORPORATE SOURCE: Searle Res. Dev., Skokie, IL, 60077, USA

SOURCE: Prostaglandins, Leukotrienes and Essential Fatty Acids

(1991), 44(1), 61-5

CODEN: PLEAEU; ISSN: 0952-3278

DOCUMENT TYPE: Journal LANGUAGE: English

IT **120072-59-5**, SC-41930

RL: BIOL (Biological study)

(granulocyte infiltration stimulation by leukotriene B4 inhibition by,

inflammation inhibition in relation to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Granulocyte diapedesis in response to the generation of defined. AB chemotaxins such as leukotriene B4 (LTB4), 12(R)-hydroxyeicosatetraenoic acid [12(R)-HETE], C5a, platelet activating factor and others is a hallmark of the inflammatory process that is thought to contribute to the tissue pathol. seen in a no. of diseases. 6-trans-LTB4 arises through the myeloperoxidase (MPO)-HETE. The intradermal (i.d.) injection of 6-trans-LTB4 induces a dose and time dependent influx of granulocytes into the guinea-pig (Hartley) dermis. When various doses of the LTB4 receptor antagonist and antiinflammatory agent, SC-41930 {7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2carboxylic acid given 30 min ahead of i.d. injection of 6-trans-LTB4 (10 .mu.g/i.d. site), granulocyte infiltration, as assessed by dermal levels of the neutrophil marker enzyme MPO was inhibited with an ED50 value of 9.8 mg/kg in the guinea-pig. When various doses (10-25 .mu.g) 6-trans-LTB4 were injected in the mouse (CD-1) dermis, there was a dose-related increase in granulocyte accumulation at 4 h. Furthermore when mice were pretreated (-30 min) with SC-41930 (1 mg/kg) orally, the trafficking of granulocytes was inhibited (p <.01) as assessed by dermal MPO levels. SC-41930 orally inhibits 6-trans-LTB4-induced granulocyte accumulation in the guinea-pig more potently than against the response to 12(R)-HETE(ED50:13.4 mg/kg) but less potently than against LTB4 (ED50:0.6 mg/kg). These multiple activities may contribute to this compd.'s potential as an inflammation inhibitor.

L3 ANSWER 80 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:549984 CAPLUS

DOCUMENT NUMBER: 115:149984

TITLE: Effect of the leukotriene B4 receptor antagonist,

SC-41930, on experimental allergic encephalomyelitis

(EAE) in the quinea pig

AUTHOR(S): Fretland, D. J.; Widomski, D. L.; Shone, R. L.; Levin,

S.; Gaginella, T. S.

CORPORATE SOURCE: Dep. Pathol., Searle Res. and Dev., Skokie, IL, 60077,

USA

SOURCE: Agents and Actions (1991), 34(1-2), 172-4

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5, SC-41930

RL: BIOL (Biological study)

(multiple sclerosis treatment with, allergic encephalomyelitis model in

relation to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

AB The accepted model for the human demyelinating disease, multiple sclerosis (MS), is exptl. allergic encephalomyelitis (EAE). The ability of SC-41930 (I) to modulate the symptoms of acute EAE was examd. in guinea pigs. Animals were pretreated with SC-41930 (20 mg/kg, i.p.) for two days followed by thrice-weekly maintenance. At day 52, a significant no. of the SC-41930-treated animals were alive as compared to EAE alone. Control animals had an increase in body wt. while EAE animals lost over 20% (p<0.5) of their body wt. by day 18. SC-41930-treatment significantly reduced, but did not completely inhibit the cachectic response. The results indirectly implicate LTB4 in the pathogenesis of EAE. Agents that modify this model may be useful in the treatment of human MS.

L3 ANSWER 81 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:549983 CAPLUS

DOCUMENT NUMBER: 115:149983

TITLE: Modulation of the chemotactic properties of complement

fragments C5a and C3 by the anti-inflammatory agent,

SC-41930

AUTHOR(S): Fretland, D. J.; Widomski, D. L.; Anglin, C. P.;

Levin, S.; Gaginella, T. S.

CORPORATE SOURCE: Dep. Pathol., Searle Res. and Dev., Skokie, IL, 60077,

USA

SOURCE: Agents and Actions (1991), 34(1-2), 5-7

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE: Journal LANGUAGE: English

IT **120072-59-5**, SC-41930

RL: BIOL (Biological study)

(complement fragment-induced chemotaxis response to, inflammation inhibition in relation to)

120072-59-5 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Cleavage of the fifth component of complement yields C5a, a potent AB neutrophil (PMN) and eosinophil chemoattractant, and modulator of microvascular permeability. Similarly, but to a lesser degree, C3 increases vascular permeability and histamine release. SC-41930 (7-[3-(4-actyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid), an orally-active antiinflammatory agent was tested in an in vivo model of dermal PMN chemotaxis induced by r-hu-C45a and hu-C3. Intradermal injection of C5a in the guinea pig resulted in a significant dose-dependent influx of PMNs at 4 h as assessed by the dermal levels of myeloperoxidase (MPO). SC-41930(20 mg/kg) given orally to guinea pigs with intradermal injections of 1 .mu.g C5a significantly reduced dermal MPO content SC-41930 was less potent against C3, requiring 40 mg/kg to significantly reduce dermal MPO levels. Agents such as SC-41930, which nullify complement's proinflammatory properties, may well have therapeutic potential.

ANSWER 82 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1991:221333 CAPLUS

DOCUMENT NUMBER:

114:221333

TITLE:

Inflammation of guinea pig dermis. Effects of leukotriene B4 receptor antagonist, SC-41930

AUTHOR(S):

Fretland, D. J.; Widomski, D. L.; Zemaitis, J. M.;

Walsh, R. E.; Levin, S.; Djuric, S. W.; Shone, R. L.;

Tsai, B. S.; Gaginella, T. S.

CORPORATE SOURCE:

Dep. Gastrointest. Dis., Searle Res. and Dev., Skokie,

IL, USA

SOURCE:

Inflammation (New York, NY, United States) (1990),

14(6), 727-39 CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE:

Journal

LANGUAGE:

English

**120072-59-5**, SC 41930

RL: BIOL (Biological study)

(skin inflammation response to topical, psoriasis treatment in relation to)

RN 120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Neutrophil (PMNL) infiltration is a prominent feature of human psoriasis. AB Psoriatic skin lesions contain abnormally high amts. of leukotriene B4 (LTB4), itself a potent PMNL chemoattractant both in vivo and in vitro. SC-41930 (I), an orally active LTB4 receptor antagonist, was tested topically in models of skin inflammation induced by 200 nmol of the calcium ionophore A23187 or 200 .mu.g phorbol-12-myristate-13-acetate (PMA) applied topically to the guinea pig ear as assessed by ear wt., levels of the PMNL marker enzyme myeloperoxidase (MPO), and histol. examn. (PMA model) at 4 and 18 h resp. When coapplied topically with A23187 or PMA, I inhibited epidermal inflammation with ED50 values of 0.6 and 4 mg, I treatment also was assocd. with lowered dermal LTB4 levels in both models. The PMA-induced skin inflammation model also was assessed histolog. and revealed acanthosis, edema, PMNL infiltration, and rete ridge prominence as long as 96 h after a single application that was completely inhibited by I topical coapplication. Furthermore, oral treatment (40 mg/kg) reduced edema and inflammatory cell infiltration in both models. These models possess many of the characteristics of human psoriass, and agents such as I that demonstrate activity in those models may well have therapeutic utility in the treatment of human psoriasis.

L3 ANSWER 83 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:178176 CAPLUS

DOCUMENT NUMBER: 114:178176

TITLE: A23187-induced pulmonary gas trapping and inflammation

in the quinea pig

AUTHOR(S): Stengel, Peter W.; Williams, G. D.; Silbaugh, S. A.

CORPORATE SOURCE: Lilly Res. Lab., Indianapolis, IN, 46285, USA

SOURCE: Agents and Actions (1991), 32(3-4), 270-6

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE: Journal LANGUAGE: English

IT **120072-59-5**, SC 41930

RL: BIOL (Biological study)

(lung obstruction and inflammation from A 23187 response to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB A brief A23187 aerosol exposure produced prolonged airway obstruction with granulocyte accumulation in conscious guinea pigs. Aminophylline,

atropine, pyrilamine, salbutamol, SC-41930 (a leukotriene B4 antagonist) and WEB 2086 (a platelet-activating factor antagonist) were administered i.v. to evaluate their ability to prevent these changes. Inhaled salbutamol was also assessed. Aminophylline, atropine, and salbutamol (i.v. and aerosol) inhibited the A23187-induced pulmonary gas trapping. Pyrilamine, SC-41930 and WEB 2086 did not influence this airway-obstructive effect. Only atropine, inhaled salbutamol and SC-41930 inhibited the cell influx, while pyrilamine potentiated the inflammation. Apparently, A23187 produces a sustained bronchospasm and an intense granulocyte accumulation. The treatment agents tested differ considerably in their ability to alter A23187-induced obstruction and inflammation.

ANSWER 84 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1991:157171 CAPLUS

DOCUMENT NUMBER:

114:157171

TITLE:

SOURCE:

SC-41930, a leukotriene B4 receptor antagonist,

inhibits 12(S)-hydroxyeicosatetraenoic acid

(12(S)-HETE) binding to epidermal cells

AUTHOR (S):

Kemeny, I.; Ruzicka, T.

CORPORATE SOURCE:

Dep. Dermatol., Univ. Munich, Munich, 8000/2, Germany

Agents and Actions (1991), 32(3-4), 339-42

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE:

Journal

LANGUAGE:

English

120072-59-5, SC-41930 IT

RL: BIOL (Biological study)

(hydroxyeicosatetraenoic acid receptors antagonism by, in epidermal

cells of humans)

RN120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN

propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

SC-41930, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-propoxyl]-3,4-dihydro-AB 8-propyl-2H-1-benzopyran-2-carboxylic acid, a potent leukotriene-B4 (LTB4) receptor antagonist, inhibits in vivo 12-hydroxyeicosatetraenoic acid (12-HETE) -induced neutrophil infiltration, suggesting a potential 12-HETE receptor antagonist effect, as well. Since 12-HETE is assumed to have a pathophysiol. role in inflammatory skin diseases, and epidermal cells possess high affinity binding sites for 12(S)-HETE, the effect of SC-41930 on 12(S)-HETE binding to the human epidermal cell line, SCL-II was studied. SC-41930 antagonized the 12(S)-HETE binding to SCL-II cells with a Ki of 480 nM. This Ki value is similar to that obtained for the inhibition of LTB4 binding to human neutrophils. Those results show that SC-41930, in addn. to its LTB4 receptor antagonist effect, exhibits 12-HETE receptor antagonist effect as well, and therefore may be of benefit in skin diseases with elevated 12-HETE levels.

ANSWER 85 OF 101 CAPLUS COPYRIGHT 2002 ACS

1991:35615 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 114:35615

Effect of the leukotriene B4 receptor antagonist TITLE:

SC-41930 on colonic inflammation in rat, guinea pig

and rabbit

Fretland, Donald J.; Widomski, Deborah; Tsai, Bie AUTHOR (S):

Shung; Zemaitis, Jeanne M.; Levin, Stuart; Djuric,

Stevan W.; Shone, Robert L.; Gaginella, Timothy S.

CORPORATE SOURCE: Dep. Gastrointest. Dis. Res., Searle Res. and Dev.,

Skokie, IL, 60077, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics

(1990), 255(2), 572-6

CODEN: JPETAB; ISSN: 0022-3565

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5, SC 41930

RL: BIOL (Biological study)

(colon inflammation prevention by, as leukotriene B4 antagonist, in

inflammatory bowel disease model)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB Inflammatory bowel disease is a chronic inflammatory disorder of the gastrointestinal tract that includes ulcerative colitis and Crohn's disease. Leukotriene B4 is thought to be a prominent proinflammatory mediator in these diseases, in that leukotriene B4 levels are increased in the colonic mucosa of inflammatory bowel disease patients and there is increased polymorphonuclear leukocyte infiltration of these tissues. The efficacy of 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid (SC-41930), a potent, orally active leukotriene B4 receptor antagonist, in a model of inflammatory bowel disease was examd. Colonic mucosal inflammation was induced in rats, guinea pig and rabbits by rectal instillation of a dil. soln. of acetic Twenty-four hours later, mucosal levels of myeloperoxidase (a marker enzyme for neutrophil infiltration) and extravasation of i.v. administered Evans blue dye (a marker of vascular disruption and increased permeability) were measured. Tissues were also evaluated histol. The animals received either SC-41930 or vehicle, intrarectally, 30 min after or 1 h before and 1 h after the acetic acid. When given 30 min after acetic acid instillation SC-41930 prevented the rise in myeloperoxidase and dye extravasation obsd. in the acetic acid inflamed tissue. The SC-41930-treated tissues were less edematous and had fewer neutrophils within the subepithelial space. Median ED (ED50) values for vascular protection were approx. 20 mg/kg for both rat and guinea pig. ED50 values for inhibition of granulocyte accumulation were 20 mg/kg for rat, 24 mg/kg for guinea pig and 30 mg/kg for rabbit. These data indicate that SC-41930 is effective locally to prevent acute colonic inflammation.

L3 ANSWER 86 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:19015 CAPLUS

DOCUMENT NUMBER: 114:19015

TITLE: Studies on the role of leukotrienes in murine allergic

and irritant contact dermatitis

AUTHOR(S): Rosenbach, T.; Csato, M.; Czarnetzki, B. M.

CORPORATE SOURCE: Dep. Dermatol., Univ. Clin., Muenster, Fed. Rep. Ger. SOURCE: British Journal of Dermatology (1988), 118(1), 1-6

CODEN: BJDEAZ; ISSN: 0007-0963

DOCUMENT TYPE: Journal LANGUAGE: English

IT 131147-29-0, Ro 23-3544 RL: BIOL (Biological study)

(allergic and irritant contact dermatitis response to, peptidoleukotrienes in relation to)

RN 131147-29-0 CAPLUS

AB A specific peptidoleukotriene receptor antagonist, Ro 23-3544, was tested for its efficacy in modulating DNFB-induced allergic and croton oil-induced irritant contact dermatitis in mouse ears. Treatment shortly after elicitation of the dermatitis, and for up to 5 days thereafter, was moderately effective in suppressing DNFB-induced ear swelling in a dose-dependent fashion. Daily pretreatment of the ears for 1 wk caused a more marked redn. of DNFB-induced ear swelling during the first 48 h after elicitation. No redn., but rather an increase in ear swelling was obsd. with croton oil-induced dermatitis. Thus, peptidoleukotrienes play a role in the early stages of elicitation of murine allergic, but not irritant contact dermatitis and a specific receptor antagonist can partially reverse the effect of peptidoleukotrienes once the dermatitis is established.

L3 ANSWER 87 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:478166 CAPLUS

DOCUMENT NUMBER: 113:78166

TITLE: Preparation of 7-(phenoxypentyloxy)-2-

dihydrobenzopyranyl alkanoates and analogs as

antiallergic agents

INVENTOR(S): Manchand, Percy Sarwood; Micheli, Robert Angelo

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 355617	A1	19900228	EP 1989-114880	19890811
R: AT, BE, 0	CH, DE	, FR, GB, IT, L	I, LU, NL, SE	
US 4931574	Α	19900605	US 1988-235129	19880823
ZA 8906332	Α	19900530	ZA 1989-6332	19890818
DK 8904132	Α	19900224	DK 1989-4132	19890822
JP 02108684	A2	19900420	JP 1989-214251	19890822
AU 8940166	A1	19900301	AU 1989-40166	19890823
AU 616997	B2	19911114		
US 5003090	A	19910326	US 1990-495527	19900319
PRIORITY APPLN. INFO.	:	US	1988-235129	19880823
OTHER SOURCE(S):	MA	RPAT 113:78166		

# IT 96565-55-8P 96566-25-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as antiallergic agent)

RN 96565-55-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

GΙ

$$R^{5}$$
 $R^{4}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 

AB The title compds. [I; R = QO(CH2)5; R1 = H, alkyl; R2 = H, halo; R3-R5 =
H, acyl, alkyl; R6 = H, alkyl; R9 = H, cation; n = 0-4] were prepd. as
antiallergic agents (no data). Thus, bezopyrancarboxylate II )R = H, R9 =
Me) was stirred 19 h with AcO(CH2)5Br (prepn. given) in DMSO contg. K2Co3
and the product converted in 2 steps to II [R = MeSO2O(CH2)5, R9 = Me]
which was refluxed 6.5 h with QOH (R1 = R2 = H) in PhMe contg. K2CO3 and
(MeOCH2CH2OCH2CH2)3N to give, after sapon., II [R = QO(CH2)5, R1 = R2 = H,
R9 = Na].

L3 ANSWER 88 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:216695 CAPLUS

DOCUMENT NUMBER: 112:216695

TITLE: Preparation and formulation of phenoxyalkoxy-3,4-

dihydro-2H-1-benzopyrans for therapy of allergic and

inflammatory disorders

INVENTOR(S): Laurenzano, Anthony James; Partridge, John Joseph

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE: Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 336068	A1	19891011	EP 1989-101886	19890203
R: AT, BE,	CH, DE	, FR, GB,	IT, LI, LU, NL, SE	
DK 8900596	Α	19890812	DK 1989-596	19890209
JP 01246275	A2	19891002	JP 1989-28803	19890209
ZA 8901036	Α	19891025	ZA 1989-1036	19890209
AU 8929820	A1	19890817	AU 1989-29820	19890210
PRIORITY APPLN. INFO	.:		US 1988-154765	19880211

OTHER SOURCE(S): MARPAT 112:216695

IT 96566-25-5 96686-71-4 96686-73-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(esterification of)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96686-71-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 96686-73-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Ac 
$$R^2$$
  $R^3$   $CO_2R^7$   $R^4$   $R^5$   $R^6$   $R^6$ 

AB Title compds. I (R1, R6 = H, alkyl; R2 = H, halo; R3-R5 = H, acyl, alkyl provided only 1 group is acyl; R7 = higher alkyl, PhCH2; X = C3-7 alkylene) and their enantiomers were prepd. and formulated. Thus, (.+-.)-6-acetyl-7-[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyloxy]-3,4dihydro-2H-1-benzopyran-2-carboxylic acid (II) was esterified by 1-octanol in PhMe with p-MeC6H4SO3H.H2O catalyst under Dean-Stark conditions to give II n-octyl ester (III) in 75% yield. Tablets contg. III, lactose, starch, polyvinylpyrrolidone, and Mg stearate were prepd. and coated with a soln. of hydroxypropyl methylcellulose phthalate in alc.-CH2Cl2. Seven syntheses and 11 formulations are described.

ANSWER 89 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:111716 CAPLUS

DOCUMENT NUMBER:

112:111716

SC-41930 inhibits neutrophil infiltration of the TITLE:

cavine dermis induced by 12(R)-hydroxyeicosatetraenoic

Journal

AUTHOR (S): Fretland, D. J.; Widomski, D. L.; Shone, R. L.;

Penning, T. D.; Miyashiro, J. M.; Djuric, S. W. Gastrointest. Dis. Res. Dep., G. D. Searle and Co.,

CORPORATE SOURCE: Skokie, IL, 60077, USA

Prostaglandins, Leukotrienes and Essential Fatty Acids SOURCE:

(1989), 38(3), 169-72

CODEN: PLEAEU; ISSN: 0952-3278

DOCUMENT TYPE:

LANGUAGE: English

120072-59-5, SC-41930

RL: BIOL (Biological study)

(neutrophil infiltration inhibition by, psoriasis in relation to)

Ι

RN 120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

Psoriasis is a disease state characterized by epidermal proliferation, neutrophil infiltration, and release of the proinflammatory mediators leukotriene-B4 (LTB4) and 12(R)-hydroxyeicosatetraenoic acid [12(R)-HETE]. LTB4 and 12(R)-HETE are chemoattractant to the neutrophil, the latter approx. 1000-fold less potent. LTB4 and 12(R)-HETE are present in psoriatic scale, the latter in quantities so much greater than LTB4 that it is proposed as a primary mediator of neutrophil infiltration in psoriasis. 12(R)-HETE, synthesized in optically pure form by a new, shorter route, was injected into the cavine dermis. At a dose of 25 .mu.g per intradermal site, 12(R)-HETE was a significant chemoattractant to the neutrophil (as assessed by dermal myeloperoxidase levels). SC-41930 (I), given intragastrically, inhibited 12(R)-HETE-induced neutrophil infiltration of the cavine dermis with an ED50 value of 13.5 mg/kg. Compds. such as SC-41930 may have utility for treating human psoriasis.

L3 ANSWER 90 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:92485 CAPLUS

DOCUMENT NUMBER: 112:92485

TITLE: SC-41930: an inhibitor of leukotriene B4-stimulated

human neutrophil functions

AUTHOR(S): Tsai, B. S.; Villani-Price, D.; Keith, R. H.;

Zemaitis, J. M.; Bauer, R. F.; Leonard, R.; Djuric, S.

W.; Shone, R. L.

CORPORATE SOURCE: Gastrointest. Dis. Res., G. D. Searle and Co., Skokie,

IL, 60077, USA

SOURCE: Prostaglandins (1989), 38(6), 655-74

Journal

CODEN: PRGLBA; ISSN: 0090-6980

DOCUMENT TYPE:

LANGUAGE: English

IT 120072-59-5, SC 41930

RL: BIOL (Biological study)

(neutrophil of human functions inhibition by)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GΙ

oncns. up to 100 .mu.M, SC-41930 (I) alone exhibited no effect on neutrophil migration, but it dose-dependently inhibited neutrophil xis induced by leukotriene B4 (LTB4) in a modified Boyden chamber. 3 .mu.M competitively inhibited LTB4-induced chemotaxis with a of 6.35. Although inactive at 10 .mu.M against complement 5a (C5a)-induced chemotaxis, I inhibited N-formyl-methionyl-leucyl-phenylalanine (fMLP)-induced chemotaxis (with 10 times less potency than against LTB4-induced chemotaxis). I inhibited [3H]LTB4 and [3H]fMLP binding to their receptor sites on human neutrophils with KD values of 0.2 .mu.M and 2 .mu.M, resp. I also inhibited neutrophil chemotaxis induced by 20-hydroxy-LTB4 or 12(R)-HETE. At concns. up to 10 .mu.M, I alone did not cause neutrophil degranulation, but it inhibited LTB4-induced degranulation in a noncompetitive manner. I also inhibited fMLP- or C5a-induced degranulation, but was about 8 and 10 times less effective for fMLP and C5a, resp. Thus, I is a human neutrophil LTB4 receptor antagonist with greater specificity for LTB4 than for fMLP or C5a receptors.

L3 ANSWER 91 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:624967 CAPLUS

DOCUMENT NUMBER: 111:224967

TITLE: Effect of a leukotriene B4 receptor antagonist on

leukotriene B4-induced neutrophil chemotaxis in cavine

dermis

AUTHOR(S): Fretland, D. J.; Widomski, D. L.; Zemaitis, J. M.;

Djuric, S. W.; Shone, R. L.

CORPORATE SOURCE: Dep. Gastrointest. Res., G. D. Searle and Co., Skokie,

IL, 60077, USA

SOURCE: Inflammation (New York, NY, United States) (1989),

13(5), 601-5

CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5, SC 41930

RL: BIOL (Biological study)

(LTB4-induced neutrophil chemotaxis in dermis response to, inflammation

inhibition in relation to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

OMe Pr-n n-Pr O- (CH<sub>2</sub>)<sub>3</sub>-O CO<sub>2</sub>H

AB Leukotriene B4 (LTB4) is a proinflammatory product of arachidonic acid metab. that has been implicated as a mediator in a no. of inflammatory diseases. When injected intradermally into the cavine, LTB4 elicites a dose-dependent immigration (chemotaxis) of neutrophils (PMNs) into the injection sites as assessed by the presence of a neutrophil marker enzyme myeloperoxidase. SC-41930, a potent LTB4 receptor antagonist inhibited the chemotactic actions of LTB4 when coadministered into the dermal site and when given i.v. or orally with ED50 values of 200 ng, 0.5 mg/kg, and 0.6 mg/kg resp. This compd. may well have application in disease states, such as inflammatory bowel disease and psoriasis, where LTB4 is implicated as a proinflammatory mediator.

L3 ANSWER 92 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:553565 CAPLUS

DOCUMENT NUMBER: 111:153565

TITLE: 3,4-Dihydro-2H-1-benzopyran-2-carboxylic acids and

related compounds as leukotriene antagonists
AUTHOR(S): Cohen, Noal; Weber, Giuseppe; Banner, Bruce L.;

Lopresti, Rocco J.; Schaer, Beatrice; Focella, Antonino; Zenchoff, Gladys B.; Chiu, Anne Marie;

Todaro, Louis; et al.

CORPORATE SOURCE: Roche Res. Cent., Hoffmann-La Roche Inc., Nutley, NJ,

07110, USA

SOURCE: Journal of Medicinal Chemistry (1989), 32(8), 1842-60

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:153565

IT 96565-55-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidn. of, with potassium persulfate)

RN 96565-55-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

Na

IT 96686-72-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and crystal structure of)

RN 96686-72-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)-, compd. with (R)-.alpha.-methylbenzenemethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 96686-71-4 CMF C28 H34 O8

Absolute stereochemistry.

CM 2

CRN 3886-69-9 CMF C8 H11 N

Absolute stereochemistry.

## IT 122444-33-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and esterification of)

RN 122444-33-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-[4-acetyl-3-hydroxy-2-propyl-6-(sulfooxy)phenoxy]pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

AC 
$$OSO_3H$$
  $O-(CH_2)_5-O$   $O-CO_2H$   $O-CO_2H$ 

IT 96566-26-6P 96566-45-9P 96566-60-8P

96566-63-1P 96566-65-3P 96566-66-4P

96566-69-7P 96594-21-7P 96686-71-4P

96686-73-6P 122444-06-8P 122444-07-9P

122444-08-0P 122444-10-4P 122444-12-6P

122444-13-7P 122444-16-0P 122444-17-1P

122444-18-2P 122444-19-3P 122444-20-6P

122444-21-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and leukotriene antagonists activity of)

RN 96566-26-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[7-(4-acetyl-3-hydroxy-2-propylphenoxy)heptyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-45-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-60-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-

hydroxyphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-63-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 96566-65-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[6-(4-acetyl-3-hydroxy-2-propylphenoxy)hexyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-66-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[4-(4-acetyl-3-hydroxy-2-propylphenoxy)butoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-69-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 8-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96594-21-7. CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96686-71-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 96686-73-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 122444-06-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-formyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 122444-07-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3,6-dihydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 122444-08-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-6-chloro-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

$$n-Pr$$
 $O-(CH_2)_5-O$ 
 $O$ 
 $CO_2H$ 
 $Ac$ 

RN 122444-10-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[2-[2-[(4-acetyl-3-hydroxy-2-propylphenoxy)methyl]phenyl]ethoxy]-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 122444-12-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)-3,3-dimethylpentyl]oxy]-3,4-dihydro-(9CI) (CA INDEX NAME)

Ac 
$$Pr-n$$
,  $Me$   $O-CH_2-CH_2-CH_2-CH_2-O$   $O-CO_2H$   $Me$   $Ac$ 

RN 122444-13-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[6-(4-acetyl-3-hydroxy-2-propylphenoxy)hexyl]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 122444-16-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-6-chloro-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 122444-17-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-6-bromo-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 122444-18-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-6-nitro-(9CI) (CA INDEX NAME)

RN 122444-19-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-6-(1-oxopropyl)- (9CI) (CA INDEX NAME)

RN 122444-20-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

AC
$$OH$$
 $O-(CH_2)_5-O$ 
 $O-(CH_2)_5-$ 

RN 122444-21-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-2-propyl- (9CI) (CA INDEX NAME)

IT 122444-41-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 122444-41-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (R)-, compd. with

(S)-.alpha.-methylbenzenemethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 96686-73-6 C28 H34 O8 CMF

Absolute stereochemistry.

$$AC$$
 $Pr-n$ 
 $AC$ 
 $OH$ 
 $Pr-n$ 
 $AC$ 
 $OH$ 

CM

CRN 2627-86-3 CMF C8 H11 N

Absolute stereochemistry.

IT 96566-25-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn., resoln., and leukotriene antagonist activity of) 96566-25-5 CAPLUS

RN

2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME) CN

HO 
$$O$$
  $CO_2H$  Ac

GI

AB Evaluation of a series of 3,4-dihydro-2H-1-benzopyran-2-carboxylic acids linked to the 2-hydroxyacetophenone pharmacophore present in the std. peptidoleukotriene antagonist FPL 55712 (I) has led to the discovery of Ro 23-3544 (II), an antagonist possessing greater potency and duration of action vs LTD4 than the std. (aerosol route of administration, guinea pig bronchoconstriction model). Interestingly, II also potently inhibited bronchoconstriction induced by LTB4 whereas I did not. Attempts to establish structure-activity relationships in this series involved modifications in the 2-hydroxyacetophenone moiety, the linking chain, and the chroman system. All variations produced analogs which were either inactive or possessed reduced potency relative to II. Optical resoln. of II was achieved by two methods. Abs. configurations of the enantiomers were detd. via x-ray crystallog. analyses of an intermediate as well as a salt of the S enantiomer. Although the enantiomers exhibited similar potencies in in vitro assays and in vivo when administered i.v., significant differences were obsd. in the guinea pig bronchoconstriction model vs LTC4 and LTD4 when administered by the aerosol route (S-antipode 15-fold more potent). The properties of II were compared with several recently reported leukotriene antagonists.

ANSWER 93 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:433445 CAPLUS

DOCUMENT NUMBER: 111:33445

TITLE: The effect of leukotriene-B4 receptor antagonist,

SC-41930, on acetic acid-induced colonic inflammation

AUTHOR (S): Fretland, D. J.; Levin, S.; Tsai, B. S.; Djuric, S.

W.; Widomski, D. L.; Zemaitis, J. M.; Shone, R. L.;

Bauer, R. F.

Journal

Dep. Gastrointest. Dis. Res., G. D. Searle and Co., CORPORATE SOURCE:

Skokie, IL, 60077, USA

SOURCE: Agents and Actions (1989), 27(3-4), 395-7

CODEN: AGACBH; ISSN: 0065-4299

LANGUAGE:

DOCUMENT TYPE:

English

120072-59-5, SC 41930 TТ

RL: BIOL (Biological study)

(intestinal inflammation therapy with, as LTB4 receptor antagonist)

120072-59-5 CAPLUS RN

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

MeO Pr 
$$O(CH_2)_3O$$
  $O$   $CO_2H$   $I$ 

AB SC 41930 (I) is a potent in vitro LTB4 receptor antagonist. LTB4 levels are elevated in colonic tissue of inflammatory bowel disease (IBD) patients, which may account for the high degree of neutrophil (PMN) infiltration. The guinea pig acetic acid-induced colonic inflammation model has characteristics of IBD including PMN infiltration, edema, ulceration and necrosis. The model was used to evaluate the effect of SC-41930. SC-41930 was given orally, 30 min before and after intrarectal administration of 3% acetic acid. The PMN marker enzyme, myeloperoxidase, was measured along with histol. evaluation to assess inflammation. Both parameters showed significantly less inflammation in SC-41930 treated animals with an oral ED50 of 20 mg/kg. These study results indicate a role for LTB4 in colonic inflammation and that an LTB4 receptor antagonist may be beneficial for treatment of IBD.

L3 ANSWER 94 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:231387 CAPLUS

DOCUMENT NUMBER: 110:231387

TITLE: 7-[3-(4-Acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-

dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid: an orally active selective leukotriene B4 receptor

antagonist

AUTHOR(S): Djuric, Stevan W.; Collins, Paul W.; Jones, Peter H.;

Shone, Robert L.; Tsai, Bie Shung; Fretland, Donald J.; Butchko, Gregory M.; Villani-Price, Doreen; Keith,

Robert H.; et al.

CORPORATE SOURCE: Gastrointest. Dis. Res., G. D. Searle and Co., Skokie,

IL, 60077, USA

SOURCE: Journal of Medicinal Chemistry (1989), 32(6), 1145-7

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal English

LANGUAGE:
OTHER SOURCE(S):

CASREACT 110:231387

IT 99453-98-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(leukotriene B4 receptor antagonistic activity of)

RN 99453-98-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

IT 120072-59-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and leukotriene B4 receptor antagonistic activity of)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

AB The title compd., (I, R = Me) (II), was prepd. by sequential coupling of the two arom. groups with Cl(CH2)3Br. II is the first orally active, selective leukotriene B4 receptor antagonist. Related compd. I (R = H) did not show any receptor antagonistic activity.

Ι

L3 ANSWER 95 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1989:199191 CAPLUS

DOCUMENT NUMBER:

110:199191

TITLE:

Preparation of 6-acetyl-7-[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyloxy]-3,4-dihydro-2H-1-benzopyran-2-

carboxylates and antiinflammatory pharmaceuticals

containing them

INVENTOR(S):

Gaginella, Timothy Samuel; Welton, Ann Frances; Will,

Peter Graig

PATENT ASSIGNEE(S): SOURCE:

Hoffmann-La Roche, F., und Co. A.-G., Switz.

Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 256532	A1	19880224	EP 1987-111781	19870813
EP 256532	B1	-19920520		

	R: BE	, CH, D	E, FR,	GB, IT	, LI,	LU, 1	NL, SI	3	
ZA	8705319		Α	1988042	7	ZA	1987	-5319	19870720
IL	83533		A1	1991112	1	$_{ m IL}$	1987	-83533	19870813
AU	8777140		A1	1988021	3	AU	1987	-77140	19870814
AU	607931		B2	1991032	1				
JP	6304821	6	A2	1988022	9	JP	1987	-201953	19870814
HU	46845		A2	1988122	8	HU	1987	-3669	19870814
HU	203471		В	1991082	В				
CA	1303508		A1	1992061	5	CA	1987	-544521	19870814
US	5112856		Α	1992051	2	US	1990	-569241	19900816
PRIORITY	APPLN.	INFO.:			τ	JS 198	86-89	7450	19860815
					τ	JS 198	89-31	5014	19890224

OTHER SOURCE(S):

MARPAT 110:199191

IT 96565-55-8 96566-25-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceuticals contg., for treatment of enteritis)

RN 96565-55-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

$$n-Pr$$
HO
 $CO_2H$ 
Ac
 $Ac$ 

Na

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

GΙ

AB The title dihydrobenzopyran derivs. (I; R = H, lower alkyl), their enantiomeric forms, or their salts are inflammation inhibitors for enteritis and other forms of inflammation of the intestinal mucosa assocd.

Ι

with the presence of leukotriene. A mixt. of 20.2 g Me (.+-.)-6-acetyl-7-(5-bromopentyloxy)-3,4-dihydro-2H-1-benzopyran-2-carboxylate and 11.0 g 2,4-dihydroxy-3-propylacetophenone were treated with 25.4 g K2CO3 in 436 mL dry Me2CO and 218 mL DMF for 5.5 h under reflux to give (.+-.)-I (R = Me) in 96.8% yield. Clindamycin-induced colitis in hamsters was characterized by edema, bleeding and stagnating blood flow, necrosis and mucosal erosions in the cecum and to a lesser extend in the colon. This condition was improved when the animals were treated with 100 mg/kg (.+-.)-I (R = H) and the hazard ratio (survival rate of treated vs. nontreated controls) was 64.0. Tablets contained (.+-.)-I (R = H) 100, lactose 30, preglatinized starch 4, microcryst. cellulose 20, modified starch 5, and Mg stearate 1 mg.

L3 ANSWER 96 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:173088 CAPLUS

DOCUMENT NUMBER:

110:173088

TITLE:

Preparation of alkoxy-substituted dihydrobenzopyran-2-

carboxylates and analogs as antiinflammatory agents

INVENTOR (S):

Djuric, Stevan Wakefield; Shone, Robert Larry; Yu,

Stella Siu Tzyy

PATENT ASSIGNEE(S):

Searle, G. D., and Co., USA

SOURCE:

Eur. Pat. Appl., 56 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
EP 292977	A1	19881130	EP 1988-108449 19880527
EP 292977	B1	19910904	
R: AT, BE, C	H, DE	, ES, FR, G	BB, GR, IT, LI, NL, SE
US 4889871	Α	19891226	US 1988-188708 19880512
NO 8802317	Α	19881130	NO 1988-2317 19880526
NO 171063	В	19921012	
NO 171063	C	19930120	
AU 8816681	A1	19881201	AU 1988-16681 19880526
AU 611153	B2	19910606	
IL 86502	A1	19940731	IL 1988-86502 19880526
CA 1337660	A1	19951128	CA 1988-567806 19880526
DK 8802901	Α	19881130	DK 1988-2901 19880527
FI 8802505	A	19881130	FI 1988-2505 19880527
JP 01038045	A2	19890208	JP 1988-130037 19880527
JP 2758902	B2	19980528	
ZA 8803820	Α	19890726	ZA 1988-3820 19880527
AT 66917	E	19910915	AT 1988-108449 19880527
ES 2051796	<b>T</b> 3	19940701	ES 1988-108449 19880527
PRIORITY APPLN. INFO.:			US 1987-57136 19870529
			US 1988-188708 19880512
			EP 1988-108449 19880527

OTHER SOURCE(S): CASREACT 110:173088; MARPAT 110:173088

IT 120072-38-0P 120072-40-4P 120072-41-5P 120072-50-6P 120072-54-0P 120072-56-2P

120072-59-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as antiinflammatory agent)

RN 120072-38-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-acetyl-2-(cyclopropylmethyl)-3-methoxyphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$CH_2$$
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 
 $O-CO_2H$ 

RN 120072-40-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-acetyl-3-methoxy-2-(2-propenyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$CH_2-CH$$
  $CH_2$   $CH_2$ 

RN 120072-41-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

MeO O- (CH<sub>2</sub>)<sub>3</sub>-O- 
$$CO_2H$$

RN 120072-50-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-methoxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 120072-54-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methyl-1-oxopropyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$i-Pr-C$$
 $n-Pr$ 
 $O-(CH2)3-O-CO2H$ 

RN 120072-56-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-ethoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

Title compds. I [ R1 = C2-6 alkyl, alkenyl, or alkynyl, (CH2)nR; n = 1,2; R = C3-5 cycloalkyl; R2 = Me, Et; R3 = C1-5 alkyl; W = (CH2)x; C3-7 alkenylene or alkynylene, cyclopentanediyl; x = 2-7; R4 = H, C2-5 alkyl, alkenyl, or alkynyl; Q = O, CH2; B = CH2, CO, CHOH; R5 = H, C1-6 alkyl, C2-4 alkanoyl, CO2H, alkoxycarbonyl; (CH2)yCO2R8; R5R6 = bond; A = ZCO2R7, ZCONR9R10; Z = bond, C.ltoreq.6 alkylene or alkenylene; R7, R8 = H, C1-6 alkyl; y = 0-4; R9, R10 = H, C1-6 alkyl, C1-6 cycloalkyl; NR9R10 = heterocyclyl] were prepd. as antiinflammatory agents. Me 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylate underwent etherification by MeI and K2CO3 in Me2CO, followed by sapon. with LiOH in aq. MeOH, to give (phenoxypropoxy)dihydrobenzopyrancarboxylic acid II. Compared to its prior art hydroxy analog II was 5-fold more potent as an LTB4 antagonist and over 10-fold less potent as an LTD4 antagonist.

L3 ANSWER 97 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

1989:33733 CAPLUS

DOCUMENT NUMBER:

110:33733

TITLE:

Benzopyran derivatives as antiinflammatory agents

Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

JP 63041474 A2 19880222 JP 1987-190527 198707	731
US 4885309 A 19891205 US 1986-893076 198608	301
ZA 8705064 A 19881026 ZA 1987-5064 198707	710
IL 83379 A1 19911121 IL 1987-83379 198707	730
DK 8704013 A 19880202 DK 1987-4013 198707	731
EP 262334 A2 19880406 EP 1987-111134 198707	731
EP 262334 A3 19900131	
R: BE, CH, DE, FR, GB, IT, LI, LU, NL, SE	
HU 46534 A2 19881128 HU 1987-3526 198707	731
HU 203470 B 19910828	
CA 1303507 A1 19920616 CA 1987-543535 198707	731
AU 8776566 A1 19880204 AU 1987-76566 198708	303

AU 601458 B2 19900913

PRIORITY APPLN. INFO.: US 1986-893076 19860801

OTHER SOURCE(S): MARPAT 110:33733

IT 96566-25-5

RL: BIOL (Biological study)

(antiinflammatory agent contg.)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

GΙ

AB Antiinflammatory agents are comprised of benzopyran derivs. I (R = H, alkyl). (.+-.)-I (R = H) showed (68 .+-. 7)% inhibition of arachidonic acid-induced ear edema in mice at 2.0 mg in topical application. An ointment was formulated from 1 g (.+-.)-I (R = H) and 100 g white vaseline.

Ι

L3 ANSWER 98 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1986:5775 CAPLUS

DOCUMENT NUMBER: 104:5775

TITLE: Substituted dihydrobenzopyran-2-carboxylates

INVENTOR(S): Miyano, Masateru; Shone, Robert Larry

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA SOURCE: Eur. Pat. Appl., 48 pp.

OURCE: Eul. Pat. Appl

99453-97-1P 99453-98-2P 99453-99-3P

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 150447	A2	19850807	EP 1984-115838	19841219
EP 150447	A3	19860528		
EP 150447	B1	19900124		
R: DE, FR,	GB, IT			
US 4565882	Α	19860121	US 1984-568846	19840106
JP 60158187	A2	19850819	JP 1985-74	19850104
JP 06031206	B4	19940427		
PRIORITY APPLN. INFO.	:	US	1984-568846	19840106
OTHER SOURCE(S):	CA	SREACT 104:5775		
IT 99453-88-0P 9945	3-91-5	P 99453-93-7P		

99454-04-3P 99454-06-5P 99454-10-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as allergy inhibitor and antiinflammatory)

RN 99453-88-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-4-oxo-8-propyl- (9CI) (CA INDEX NAME)

RN 99453-91-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 99453-93-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-ethyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 99453-97-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[[5-[4-(methoxycarbonyl)-2-propylphenoxy]pentyl]oxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 99453-98-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 99453-99-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)-2-hydroxypropoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OH} & \text{n-Pr} \\ \text{O-CH}_2-\text{CH-CH}_2-\text{O} & \text{CO}_2\text{H} \\ \\ \text{Pr-n} & \text{OH} \end{array}$$

RN 99454-04-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-2-methyl-8-propyl- (9CI) (CA INDEX NAME)

RN 99454-06-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-4-hydroxy-8-propyl- (9CI) (CA INDEX NAME)

RN 99454-10-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-4-oxo-8-propyl-7-[[5-(2-propylphenoxy)pentyl]oxy]- (9CI) (CA INDEX NAME)

GI

MeCO 
$$\stackrel{\text{Pr}}{\longrightarrow}$$
 0 (CH<sub>2</sub>) 50  $\stackrel{\text{Pr}}{\longrightarrow}$  0  $\stackrel{\text{R5}}{\longrightarrow}$  CO<sub>2</sub>Et  $\stackrel{\text{R10}}{\longrightarrow}$ 

Antiallergy and antiinflammatory (no data) title compds. I (R1 = H, Et, MeCO, MeCHOH, EtO2C; R2 = H, OH, alkanoyloxy, CH2:CHCH2CH2CO2; R3, R4 = H, alkyl, CH2:CHCH2; R5 = H, alkanoyl; R6 = H, R9O; R7 = H, R8 = H, OH, alkoxy, CH2:CHCH2CH2O; R7R8 = O; R9 = H, alkyl, alkali metal, ammonium; Z = (hydroxy)alkylene] were prepd. Thus, 3,2,4-Pr(HO)2C6H2COMe was alkylated with Br(CH2)5Br to give 73% 2,3,4-Pr(HO) (MeCO)C6H2O(CH2)5Br. This was condensed with Et 7-hydroxy-8-propyl-4-oxo-4H-1-benzopyran-2-carboxylate to give 44% (pentyloxy)chromone II (R5R10 = bond) which was hydrogenated over Raney Ni to give 51% II (R5, R10 = H).

ΙI

Ι

L3 ANSWER 99 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1985:560389 CAPLUS

DOCUMENT NUMBER: 103:160389

TITLE: Benzopyran antimetabolites
PATENT ASSIGNEE(S): Searle, G. D., and Co., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		- <del>-</del>		
JP 60042378	A2	19850306	JP 1984-14978	19840130
JP 62008432	B4	19870223		

	8423157	A1	19850214	AU 1984-23157	19840109
AU	548450	B2	19851212		
ZA	8400345	Α	19850227	ZA 1984-345	19840117
EP	139809	A1	19850508	EP 1984-100466	19840118
EP	139809	B1	19880727		
	R: BE, CH,	DE, FR	, GB, IT,	LI, NL, SE	
EP	254329	A1	19880127	EP 1987-112296	19840118
EP	254329	B1	19900926		
	R: BE, CH,	DE, FR	, GB, IT,	LI, NL, SE	
CA	1270834	A1	19900626	CA 1984-446171	19840127
US	4778903	Α	19881018	US 1984-681038	19841212
US	4665203	Α	19870512	US 1985-764697	19850812
JР	62070368	A2	19870331	JP 1986-186103	19860807
JP	02050113	B4	19901101		
US	4952705	Α	19900828	US 1987-13807	19870212
US	4888356	Α	19891219	US 1988-206624	19880614
PRIORITY	APPLN. INFO	).:		US 1983-520973	19830808
				US 1983-560355	19831212
				EP 1984-100466	19840118
				US 1984-681038	19841212
				US 1985-764697	19850812
				03 1303-704037	19050012

OTHER SOURCE(S):

CASREACT 103:160389

IT 98193-16-9P 98193-69-2P

RN 98193-16-9 CAPLUS

CN 2H-1-Benzopyran-2-propanoic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-2-carboxy-3,4-dihydro-4-oxo-8-propyl- (9CI) (CA INDEX NAME)

$$CO_{2}H$$

O-  $(CH_{2})_{3}$ - O-  $CH_{2}$ -  $C$ 

RN 98193-69-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-2-(2-carboxycyclopropyl)-3,4-dihydro-8-propyl-(9CI) (CA INDEX NAME)

MeCO 
$$R$$
  $R^1$   $O(CH_2)_{mO}$   $O(CH$ 

AB Benzopyrans I and II (R, R1 = alkyl; R2 = alkyl, carboxyl, alkoxycarbonylalkyl; R3 = H, carboxyl, alkoxycarbonyl, aminocarbonyl, OH; Z = alkylene, alkenylene, etc.; Z1 = O; H2; H, OH; m = 2-6), useful as leukotriene D4 inhibitors, were prepd. Thus, refluxing 2,4-dihydroxy-3-propylacetophenone with Et levulinate and pyrrolidine in PhMe gave benzopyranes III [R4 = EtO (IV), pyrrolidino]. Stirring IV with bromide V and K2CO3 in DMF gave I (R = R1 = Pr, R2 = Me, R3 = EtO, Z = CH2CH2, Z1 = O, m = 3).

V

L3 ANSWER 100 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1985:406223 CAPLUS

DOCUMENT NUMBER: 103:6223

TITLE: Phenoxyalkoxy-3,4-dihydro-2H-1-benzopyran derivatives

INVENTOR(S): Cohen, Noal; Weber, Giuseppe F.

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE: Eur. Pat. Appl., 109 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

MeCO

PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP	129906	A1	19850102	EP 1984-107289	19840625
EP	129906	B1	19880608		
	R: AT, BE,	CH, DE	, FR, GB,	IT, LI, LU, NL, SE	
US	4785017	Α	19881115	US 1984-614368	19840529
ZA	8404519	Α	19850227	ZA 1984-4519	19840614
FI	8402497	Α	19841225	FI 1984-2497	19840620
FI	87207	В	19920831		
FI	87207	C	19921210		
DK	8403047	Α	19841225	DK 1984-3047	19840621
IL	72187	A1	19900209	IL 1984-72187	19840621
NO	8402549	Α	19841227	NO 1984-2549	19840622
NO	168643	В	19911209		

NO 168643	С	19920318			
AU 8429785	A1	19850103	ΑU	1984-29785	19840622
AU 565490	B2	19870917			
BR 8403068	A	19850528	BR	1984-3068	19840622
HU 36816	A2	19851028	HU	1984-2427	19840622
HU 202512	В	19910328			
CS 246085	B2	19861016	CS	1984-4772	19840622
JP 60019782	A2	19850131	JP	1984-128475	19840623
JP 04069153	B4	19921105			
ES 533678	A1	19851001	ES	1984-533678	19840623
AT 34981	E	19880615	AT	1984-107289	19840625
ES 541709	A1	19851201	ES	1985-541709	19850329
CS 246098	B2	19861016	CS	1985-3161	19850430
US 4788214	Α	19881129	US	1986-907244	19860915
ZA 8607083	Α	19880427	ZA	1986-7083	19860917
CA 1281030	A1	19910305	CA	1986-518504	19860918
AU 590798	B2	19891116	AU	1986-63013	19860922
AU 8663013	A1	19880324			
PRIORITY APPLN. INFO.:		US	198	33-507383	19830624
		US	198	34-614368	19840529
		CS	198	34-4772	19840622
		EP	198	34-107289	19840625
		US	198	35-758256	19850724
OTHER SOURCE(S):	CAS	SREACT 103:6223			

OTHER SOURCE(S): CASREACT 103:6223
IT 96565-55-8P 96566-19-7P 96566-22-2P
96566-24-4P 96566-26-6P 96566-28-8P
96566-45-9P 96566-51-7P 96566-60-8P
96566-63-1P 96566-64-2P 96566-65-3P

96566-66-4P 96566-67-5P 96566-68-6P 96566-69-7P 96594-21-7P 96686-71-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and antiallergy activity of)

RN 96565-55-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 96566-19-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-22-2 CAPLUS

RN 96566-24-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 96566-26-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[7-(4-acetyl-3-hydroxy-2-propylphenoxy)heptyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-28-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 8-acetyl-7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-45-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-51-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxyphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Ac 
$$OH$$
  $O-(CH_2)_5-O$   $O-(CO_2H)$   $O-(CH_2)_5-O$   $O-(CO_2H)$ 

RN 96566-60-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxyphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-63-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 96566-64-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxyphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-65-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[6-(4-acetyl-3-hydroxy-2-propylphenoxy)hexyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-66-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[4-(4-acetyl-3-hydroxy-2-propylphenoxy)butoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96566-67-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-hydroxyphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 96566-68-6 CAPLUS

RN 96566-69-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 8-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96594-21-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

96686-71-4 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-CNpropylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

96686-72-5P 96686-74-7P IT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and conversion to free acid) 96686-72-5 CAPLUS

RN

2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-CNpropylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)-, compd. with (R) -.alpha.-methylbenzenemethanamine (1:1) (9CI) (CA INDEX NAME)

CM

96686-71-4 CRN CMF C28 H34 O8

Absolute stereochemistry.

CM 2

CRN 3886-69-9 CMF C8 H11 N

Absolute stereochemistry.

RN96686-74-7 CAPLUS CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (R)-, compd. with (R)-.alpha.-methylbenzenemethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 96686-73-6 CMF C28 H34 O8

Absolute stereochemistry.

$$AC$$
 $Pr-n$ 
 $AC$ 
 $OH$ 
 $Pr-n$ 
 $AC$ 
 $OH$ 

CM 2

CRN 3886-69-9 CMF C8 H11 N

Absolute stereochemistry.

IT 96686-71-4P

RN 96686-71-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 96566-25-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, with sodium hydroxide or resoln. of)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

### IT 96686-73-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn., esterification, and antiallergy activity of)

RN 96686-73-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

GI

$$CH_2CH_2CO_2Et$$

HO

Me

II

O(CH<sub>2</sub>) 3Br III

AB Benzopyran derivs. I [R1 = H, alkyl; R2 = H, halo; R3, R4, R5 = H, acyl, alkyl; R6, R7 = H, R8 = CO2R9; R6 = H, alkyl, R7 = (CH2)nCO2R9, R8 = H; R9 = H, alkyl; Z = C3-7 alkylene; n = 0-4] and, when R9 = H, their salts with pharamceutically tolerable bases, useful in treating allergy, were prepd. Refluxing a mixt. of 2,4-(HO)2C6H3COMe, MeCOCH2CH2CO2Et, pyrrolidine, and PhMe 3 h with stirring gave 58.1% benzopyranpropanoate (.+-.)-II (Z1 = O),

redn. of which with BF3.Et2O and BH3 in THF gave 63.1% (.+-.)-II (Z1 = H2). Treating NaH-mineral oil in DMF with (.+-.)-II (Z1 = H2) in DMF, then with acetophenone III in DMF gave 46.5% diether (.+-.)-IV (R = Et), sapon. of which in 1:1 THF-H2O with LiOH.H2O in 22 h at room temp. gave 95.8% (.+-.)-IV (R = H). (.+-.)-IV (R = H) had IC50 1 .times. 10-7 in the guinea pig ileum test of SRS-A antagonism.

L3 ANSWER 101 OF 101 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1983:575604 CAPLUS

DOCUMENT NUMBER:

99:175604

TITLE:

Anti-SRS-A carboxylic acid derivatives and pharmaceutical formulations containing them

INVENTOR(S):

Bantick, John Raymond

PATENT ASSIGNEE(S):

Fisons Ltd., UK

SOURCE:

Eur. Pat. Appl., 67 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 79637	A1	19830525	EP 1982-201368	19821101
EP 79637 .	B1	19870128		
R: AT, BE,	CH, DE	, FR, GB,	IT, LI, LU, NL, SE	
US 4474788	A	19841002	US 1982-438163	19821101
AT 25251	E	19870215	AT 1982-201368	19821101
JP 58090557	A2	19830530	JP 1982-196883	19821111
PRIORITY APPLN. INFO	. :		GB 1981-34186	19811112
			EP 1982-201368	19821101

## IT 87472-31-9P 87491-55-2P

RN 87472-31-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)-2-hydroxypropoxy]-3,4-dihydro-4-oxo-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OH} & \text{n-Pr} \\ \text{O-CH}_2-\text{CH-CH}_2-\text{O} & \text{CO}_2\text{H} \\ \\ \text{Ac} & \text{Pr-n} & \text{O} \end{array}$$

RN 87491-55-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)-2-hydroxypropoxy]-3,4-dihydro-4-oxo-8-propyl-, monosodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OH} & \text{n-Pr} \\ \text{O-CH}_2-\text{CH-CH}_2-\text{O} & \text{CO}_2\text{H} \\ \\ \text{Pr-n} & \text{OH} & \text{O} \end{array}$$

Na

GI

AB Anti-allergy (no data) bicyclic compds. I [R, R1 = H, alkyl; RR1 = bond; R2 = CO2H, carboxyalkyl; R3 = substituted OH, SH, NH2; R4, R5 = H, halogen, (un)substituted OH, NH2, alkyl, acyl; X = S, O, NR6 (R6 = H, alkyl)] were prepd. Thus, 3,2,4-Pr(HO)2C6H2Ac reacted with 4,2,3-AcPr(H2N)C6H2S(CH2)3Br to give phenol II, which cyclized with EtO2CCO2Et to give quinoline III [R7 = Et, R8R9 = CH:C(CO2Et)]. The latter compd. gave III (R7 = H, R8 = Me, R9 = H) on hydrolysis.

# => d his

L3

(FILE 'HOME' ENTERED AT 18:15:27 ON 19 NOV 2002)

FILE 'REGISTRY' ENTERED AT 18:15:34 ON 19 NOV 2002

L1 STRUCTURE UPLOADED

223846 CONDITION

L2 155 S L1 FUL

FILE 'CAPLUS' ENTERED AT 18:16:08 ON 19 NOV 2002 101 S L2

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211660 DISORDER
           111317 DISORDERS
           293073 DISORDER
                       (DISORDER OR DISORDERS)
                48 L3 AND (DISEASE OR CONDITION OR DISORDER)
L4
=> d l4 ibib hitstr abs 1-48
      ANSWER 1 OF 48 CAPLUS COPYRIGHT 2002 ACS
                                  2002:594844 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                                  137:140518
                                  Preparation of thiazolyl-, oxazolyl-, pyrrolyl-, and
TITLE:
                                  imidazolyl- acid amide derivatives as inhibitors of
                                  phosphodiesterase IV isozymes
                                  Marfat, Anthony; McKechney, Michael William
INVENTOR(S):
                                  Pfizer Products Inc., USA
PATENT ASSIGNEE(S):
                                  PCT Int. Appl., 249 pp.
SOURCE:
                                  CODEN: PIXXD2
DOCUMENT TYPE:
                                  Patent
LANGUAGE:
                                  English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                             KIND DATE
                                                          APPLICATION NO. DATE
                             ----
                                      -----
                                                           _____
                                                                                  _____
       ______
                                                         WO 2001-IB2728
      WO 2002060898
                              A1
                                      20020808
                                                                                  20011224
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      US 2002123520
                              A1
                                    20020905
                                                          US 2002-62145
                                                                                  20020131
PRIORITY APPLN. INFO.:
                                                       US 2001-265486P P 20010131
OTHER SOURCE(S):
                                  MARPAT 137:140518
      96566-25-5, Ablukast
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
           (combination therapy with PDE4 inhibitors; prepn. of thiazolyl-,
           oxazolyl-, pyrrolyl-, and imidazolyl- acid amide derivs. as inhibitors
          of PDE4 isoenzymes)
       96566-25-5 CAPLUS
RN
       2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-
CN
      propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)
      n-Pr
                                                          CO2H
HO
                       (CH<sub>2</sub>) 5
Ac
```

1376783 CONDITIONS 1553636 CONDITION

(CONDITION OR CONDITIONS)

AΒ Title compds. I [wherein p = 0-1; q = 0-1; provided that when q = 0, n = 02; m = 0-3; n = 1-2; W1 and W2 = independently O, SOO-2, or NR3; or W2 = (un) substituted methylene; Y = SOO-2, O, NOO-1, NR3, or (un) substituted methylene; ; RA and RB = independently H, F, CF3, alkyl, or (un) substituted cycloalkyl, Ph, or benzyl; or when m = 1, CRARB = (un) substituted spiro; RC and RD have the same meaning as RA and RB except that one of them must be H; R1 and R2 = H, F, C1, CN, NO2, (fluoro)alky1, alkynyl, alkoxy, phenoxy, carbamoyl, etc.; R3 = H, alkyl, Ph, benzyl, alkoxy, phenoxy, etc.; R4, R5, and R6 = H, F, Cl, and (un) substituted (cyclo)alkyl, alkenyl, alkynyl, Ph, benzyl, pyridyl, alkoxy, phenoxy, acyl, carboxy, CN, NO2, carbamoyl, ureido, (hetero)aryl, etc.; G1 and G2 = independently (un) satd. carbocyclyl or heterocyclyl; E = (un) substituted carboxy, carbamoyl, acyl, hydroxyalkyl, cyanoalkyl, acylamino, ureido, amino, heterocyclyl, etc.] were prepd. as inhibitors of PDE4 (no data). For example, 4-(3-cyanophenoxy)thiazole-5-carboxylic acid was treated with 2-(4-aminomethylphenyl)propan-2-ol in the presence of EDCl and HOBT in DMF to give the thiazolamide II. I are useful in the treatment of diseases regulated by the activation and degranulation of eosinophils, esp. asthma, chronic bronchitis, and chronic obstructive pulmonary disease (no data). In addn., I may be used in combination therapy with a wide variety of other therapeutic agents. REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

I

II

L4 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:594842 CAPLUS

DOCUMENT NUMBER: 137:154859

TITLE: Preparation of carbamoyl-substituted pyridinyl aryl

ether derivatives as inhibitors of phosphodiesterase

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IV isozymes

INVENTOR(S): Chambers, Robert James; Magee, Thomas Victor; Marfat,

Anthony

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 285 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ ---------20020808 WO 2001-IB2726 20011224 WO 2002060896 **A1** W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2001-265304P P 20010131 PRIORITY APPLN. INFO.: MARPAT 137:154859 OTHER SOURCE(S): **96566-25-5**, Ablukast RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy with PDE4 inhibitors; prepn. of carbamoyl-substituted pyridinyl aryl ether derivs. as inhibitors of PDE4 isoenzymes) 96566-25-5 CAPLUS RN2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-CN propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

Title compds. compds. I [wherein p = 0-1, provided that when p = 0, n = 2; AΒ m = 1-3; n = 1-2; W1 and W2 = independently O, S(O)0-2, or NR3; Y = =C(R1a) or N(0)0-1; R1a = H, F, Cl, CN, NO2, (fluoro)alkyl, alkynyl, fluoroalkoxy, OR16, or (un) substituted carbamoyl; RA and RB = independently H, F, CF3, or (un) substituted (cyclo) alkyl, Ph, or benzyl; or CRARB = spiro moiety; RC and RD = the same as RA and RB except that one of them must be H; R1 and R2 = independently H, F, C1, CN, NO2, (fluoro)alkyl, alkynyl, OR16, or (un)substituted carbamoyl; R3 = H, alkyl, Ph, benzyl, or OR16; R4, R5 and R6 = independently H, F. Cl, alkynyl, R16, OR16, SO0-2R16, COR16, CO2R16, OCOR16, CN, NO2, (un) substituted carbamoyl(oxy), ureido, carboximidoyl, aryl, heterocyclyl, etc.; or R5 and R6 taken together with the atoms to which they are attached = (hetero)cyclyl; J1 and J2 = independently (un)substituted, (un)satd. monocyclic or fused polycyclic ring; D = (un)substituted carboxy, carbamoyl, acyl, hydroxy(alkyl), cyano(alkyl), etc.; R16 = H or (un) substituted (cyclo) alkyl, alkenyl, Ph, benzyl, or pyridyl] were prepd. as inhibitors of PDE4 (no data). For example, 2-(benzo[1,3]dioxol-5yloxy) nicotinic acid was coupled with (4-aminomethyl-3fluorophenoxy) acetic acid Me ester in the presence of 1hydroxybenzotriazole.bul.H2O and 1-[3-(dimethylamino)propyl]-3ethylcarbodiimide.bul.HCl in DMF/CH2Cl2 to give the pyridinecarboxamide II (R = Me) in 38% yield. Sapon. using aq. LiOH in THF and MeOH afforded the desired acid II (R = OH) in 21% yield. I are useful in the treatment of diseases regulated by the activation and degranulation of eosinophils, esp. asthma, chronic bronchitis, and chronic obstructive pulmonary disease (no data). In addn., I may be used in combination therapy with a wide variety of other therapeutic agents. REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

Ι

II

L4 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:594822 CAPLUS

DOCUMENT NUMBER: 137:154857

TITLE: Preparation of nicotinamide biaryl derivatives as

inhibitors of PDE4 isozymes

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR(S): Chambers, Robert James; Magee, Thomas Victor; Marfat,

Anthony

PATENT ASSIGNEE(S): Pfizer Productors Inc., USA

SOURCE: PCT Int. Appl., 224 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_ \_ \_ \_ \_\_\_\_\_ 20020808 WO 2001-IB2341 20011206 WO 2002060875 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2001-265492P P 20010131

OTHER SOURCE(S): MARPAT 137:154857

IT 96566-25-5, Ablukast

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (in combination with; prepn. of biaryl nicotinamides as inhibitors of PDE4 isoenzymes)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

 $\mathbf{GI}$ 

### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I; g = 0-1; j = 0-1; provided that when j = 0, n must be 2; k = 0-1; m = 0-2; n = 1-2; W1 = 0, SOt (t = 0-2), NR3; W2 = OCR9R10, or absent; Y = CR1, NOk (k = 0-1); R9, R10 = H, F, CF3, etc.; or R9 and R10 are taken together, but only in the case where m = 1, to form a spiro moiety; R7, R8 have the same meaning as R9, R10 except that one of them must be H; R1, R2 = H, F, Cl, etc.; R3 = H, alkyl, Ph, etc.; R4-R6 = H, F, Cl, etc.; Q1 = Ph, benzodioxyl, etc.; Q2 = biaryl moiety], useful as inhibitors of PDE4 in the treatment of diseases regulated by the activation and degranulation of eosinophils, esp. asthma, chronic bronchitis, and chronic obstructive pulmonary disease, were prepd. E.g., a multi-step synthesis of the amide II, starting from Me 3-bromobenzoate and 4-formylbenzeneboronic acid, was given. Compds. I showed anti-inflammatory activity at 0.0001 .mu.M to 20.0 .mu.M in whole blood assay for LTE4.

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 4 OF 48 CAPLUS COPYRIGHT 2002 ACS
                                                 2002:575765 CAPLUS
ACCESSION NUMBER:
                                                 137:140435
DOCUMENT NUMBER:
                                                 Benzopyrancarboxylic acid derivatives with PPAR
TITLE:
                                                 agonist activity for the treatment of diabetes and
                                                 lipid disorders, and their preparation,
                                                 pharmaceutical compositions, and use
                                                 Sahoo, Soumya P.; Koyama, Hiroo; Miller, Daniel J.;
INVENTOR (S):
                                                 Boueres, Julia K.; Desai, Ranjit C.
PATENT ASSIGNEE(S):
SOURCE:
                                                 U.S. Pat. Appl. Publ., 42 pp.
                                                 CODEN: USXXCO
DOCUMENT TYPE:
                                                 Patent
                                                 English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                    APPLICATION NO. DATE
         PATENT NO.
                                          KIND DATE
                                          ----
                                                       -----
                                                                                                                     20011029
                                                      20020801
                                                                                    US 2001-21667
         US 2002103242
                                            Α1
                                                                                    WO 2001-US49501 20011026
                                            A2
                                                      20020808
         WO 2002060434
                 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                              US 2000-244698P P 20001031
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                                                 MARPAT 137:140435
         444341-48-4P, 7-[3-(3-Trifluoromethyl-7-propylbenz[4,5]isoxazol-6-
         yloxy)propoxy]-2-ethylchromane-2-carboxylic acid 444341-49-5P,
          7-[3-[[3-(2,2-Dimethylpropyl)-7-propylbenz[4,5]isoxazol-6-yl]oxy]propoxy]-
          2-ethylchromane-2-carboxylic acid 444341-50-8P,
          7-[3-(3-Phenyl-7-propylbenz[4,5]isoxazol-6-yloxy)propoxy]-2-methylchromane-
          2-carboxylic acid 444341-51-9P, 7-[3-[4-(1,2-Benzisoxazol-3-yl)-
          2-propylphenoxy]propoxy]-2-ethylchromane-2-carboxylic acid
          444341-52-0P, 7-[3-[2-Chloro-4-(2,2,2-
          trifluoroethoxy)phenoxy]propoxy]chromane-2-carboxylic acid
          444341-53-1P, 7-[3-[2-Chloro-4-(2,2,2-
          trifluoroethoxy)phenoxy]propoxy]-2-methylchromane-2-carboxylic acid
          444341-54-2P, 7-[3-[2-Chloro-4-(2,2,2-
          trifluoroethoxy) phenoxy] propoxy] -2-ethylchromane-2-carboxylic acid
          444341-55-3P, 7-[3-[2-Chloro-4-(2,2,2-
          trifluoroethoxy)phenoxy]propoxy]-2-propylchromane-2-carboxylic acid
          444341-56-4P, 7-[3-[2-Propyl-4-(2,2,2-
          trifluoroethoxy)phenoxy]propoxy]-2-ethylchromane-2-carboxylic acid
          444341-57-5P, 7-[3-(2-Chloro-4-tert-butylphenoxy)propoxy]-2-
          methylchromane-2-carboxylic acid 444341-58-6P,
          7-[3-(2-Chloro-4-cyclohexylphenoxy)propoxy]-2-methylchromane-2-carboxylic
          acid 444341-59-7P, 7-[3-(2-Chloro-4-cyclohexylphenoxy)propoxy]-2-
          ethylchromane-2-carboxylic acid 444341-60-0P,
          (2R) -7-[3-[2-Chloro-4-(4-tetrahydropyranyl)phenoxy]propoxy]-2-
          ethylchromane-2-carboxylic acid 444341-62-2P,
          (2R) - 7 - [3 - [2 - Chloro - 4 - (4, 4 - dimethylcyclohexyl) phenoxy] - 2 - (3, 4 - dimethylcyclohexyl) phenoxy] - 2 - (4, 4 - dimethylcyclohexyl) phenoxy] - 2 - (4, 4 - dimethylcyclohexyl) phenoxy] - 2 - (4, 4 - dimethylcyclohexyl) phenoxy] - (4, 4 - dimethylcyclohexyl) phenoxyl) phenoxyl) - (4, 4 - dimethylcyclohexyl) - (4, 4 - dimethylcyclohexyll) - (4, 4 - dimethylcyclohexyll
          ethylchromane-2-carboxylic acid 444341-63-3P,
          (2R) -7-[3-(2-Chloro-4-cyclohexylphenoxy)propoxy]-2-ethylchromane-2-
          carboxylic acid 444341-64-4P, (2R)-7-[3-(2-Chloro-4-
          isopropylphenoxy)propoxy]-2-ethylchromane-2-carboxylic acid
          444341-65-5P, (2R)-7-[3-(2-Chloro-4-tert-butylphenoxy)propoxy]-2-
          ethylchromane-2-carboxylic acid 444341-66-6P,
```

(2R) -7-[3-(2-Chloro-4-isobutylphenoxy)propoxy]-2-ethylchromane-2carboxylic acid 444341-67-7P, (2R)-7-[3-(2-Chloro-4trifluoromethylphenoxy)propoxy]-2-ethylchromane-2-carboxylic acid 444341-68-8P, (2R)-7-[3-(2-Chloro-4-trifluoromethoxyphenoxy)propox y]-2-ethylchromane-2-carboxylic acid 444341-69-9P, (2R) -7-[3-[2-Chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-2ethylchromane-2-carboxylic acid 444341-70-2P, (2S) -7-[3-[2-Chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-2ethylchromane-2-carboxylic acid 444341-71-3P, (2R) -7-[3-(2-Chloro-4-cyclohexylphenoxy)propoxy]-2-methylchromane-2carboxylic acid 444341-72-4P, (2R)-7-[3-(2-Chloro-4cyclopentylphenoxy)propoxy]-2-methylchromane-2-carboxylic acid 444341-73-5P, (2R)-7-[3-(2-Chloro-4-tert-butylphenoxy)propoxy]-2methylchromane-2-carboxylic acid 444341-74-6P, (2R) -7-[3-(2-Chloro-4-isobutylphenoxy)propoxy]-2-methylchromane-2carboxylic acid 444341-75-7P, (2R)-7-[3-[2-Chloro-4-(2,2,2trifluoroethoxy) phenoxy] propoxy] -2-methylchromane-2-carboxylic acid 444341-76-8P, (2R)-7-[3-[2-Chloro-4-(4tetrahydropyranyl)phenoxy]propoxy]-2-methylchromane-2-carboxylic acid 444341-77-9P, (2S)-7-[3-[2-Chloro-4-(2,2,2trifluoroethoxy)phenoxy]propoxy]-2-methylchromane-2-carboxylic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of benzopyrancarboxylic acid derivs. as PPAR agonists for treatment of diabetes and lipid **disorders**)

RN 444341-48-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[3-[[7-propyl-3-(trifluoromethyl)-1,2-benzisoxazol-6-yl]oxy]propoxy]- (9CI) (CA INDEX NAME)

RN 444341-49-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[[3-(2,2-dimethylpropyl)-7-propyl-1,2-benzisoxazol-6-yl]oxy]propoxy]-2-ethyl-3,4-dihydro- (9CI) (CA INDEX NAME)

Et O (CH<sub>2</sub>)<sub>3</sub>-O N 
$$CH_2$$
-CMe<sub>3</sub>

RN 444341-50-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2-methyl-7-[3-[(3-phenyl-7-propyl-1,2-benzisoxazol-6-yl)oxy]propoxy]- (9CI) (CA INDEX NAME)

RN 444341-51-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(1,2-benzisoxazol-3-yl)-2-propylphenoxy]propoxy]-2-ethyl-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 444341-52-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 444341-53-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-3,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

$$C1$$
  $O-(CH_2)_3-O$   $O-(CH_2)_3-O$   $O-(CH_2)_3-O$   $O-(CH_2)_3-O$ 

RN 444341-54-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-2-ethyl-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 444341-55-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-3,4-dihydro-2-propyl- (9CI) (CA INDEX NAME)

$$C1$$
  $CO_2H$   $CO_2H$ 

RN 444341-56-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[3-[2-propyl-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]- (9CI) (CA INDEX NAME)

$$r_3$$
C-CH<sub>2</sub>-O (CH<sub>2</sub>)<sub>3</sub>-O Et

RN 444341-57-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(1,1-dimethylethyl)phenoxy]propoxy]-3,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

RN 444341-58-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-cyclohexylphenoxy)propoxy]-3,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

RN 444341-59-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-cyclohexylphenoxy)propoxy]-2-ethyl-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 444341-60-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(tetrahydro-2H-pyran-4-yl)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 444341-62-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4,4-dimethylcyclohexyl)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c} \text{O} \\ \text{CO}_2\text{H} \\ \text{Me} \end{array}$$

RN 444341-63-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-cyclohexylphenoxy)propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 444341-64-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(1-methylethyl)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $R$ 
 $Et$ 
 $CO_2H$ 

RN 444341-65-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(1,1-dimethylethyl)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 444341-66-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2-methylpropyl)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $R$ 
 $Et$ 
 $CO_2H$ 

RN 444341-67-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(trifluoromethyl)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CAINDEX NAME)

Absolute stereochemistry.

RN 444341-68-8 CAPLUS

RN 444341-69-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $R$ 
 $Et$ 
 $CO_2H$ 

RN 444341-70-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $S$ 
 $Et$ 
 $CO_2H$ 

RN 444341-71-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-cyclohexylphenoxy)propoxy]-3,4-dihydro-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 444341-72-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-cyclopentylphenoxy)propoxy]-3,4-dihydro-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

RN 444341-73-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(1,1-dimethylethyl)phenoxy]propoxy]-3,4-dihydro-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $CCH_2)_3$ 
 $CCH_2)_3$ 
 $CCH_2)_3$ 
 $CCH_2)_3$ 
 $CCH_2)_3$ 
 $CCH_2)_3$ 
 $CCH_2)_3$ 

RN 444341-74-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2methylpropyl)phenoxy]propoxy]-3,4-dihydro-2-methyl-, (2R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $R$ 
 $CO_2H$ 
 $Me$ 

RN 444341-75-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-3,4-dihydro-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $R$ 
 $CO_2H$ 
 $Me$ 

RN 444341-76-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(tetrahydro-2H-pyran-4-yl)phenoxy]propoxy]-3,4-dihydro-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

RN 444341-77-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(2,2,2-trifluoroethoxy)phenoxy]propoxy]-3,4-dihydro-2-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $O$ 
 $CH_2)_3$ 
 $O$ 
 $S$ 
 $CO_2H$ 
 $Me$ 

GI

$$\begin{array}{c|c} & & & & \\ \text{Et} & & & & \\ \text{HO}_2\text{C} & & & & \\ \end{array}$$

AB A class of benzopyrancarboxylic acid derivs. is disclosed, which comprises compds. that are potent agonists (no data) of peroxisome proliferator activated receptors (PPAR) alpha and/or gamma, and are therefore useful in the treatment, control, or prevention of non-insulin dependent diabetes mellitus (NIDDM), hyperglycemia, dyslipidemia, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, atherosclerosis, obesity, vascular restenosis, inflammation, and other PPAR alpha and/or gamma mediated diseases, disorders and conditions.

In particular, compds. I and their pharmaceutically acceptable salts and/or prodrugs are disclosed [wherein: Z = CH2, CO; R1 = H, OH, halo, (un)substituted alk(en/yn)yl, alk(en/yn)yloxy, or aryl; or R1 forms

(un) substituted cyclopropane fusion to adjacent C atom; X, Y = O, S, SO, SO2, CH2, (un) substituted NH; n = 1-6; R4 = (un) substituted benzoheterocyclyl, cycloalkyl, heterocyclyl, cycloalkyloxy, halo, OH or derivs., alk(en/yn)yl, alk(en/yn)yloxy, or aryl, etc.; other R groups = H, halo, OH, (un)substituted alk(en/yn)yl, alk(en/yn)yloxy, aryl, aryloxy, aroyl, etc.; or R3R4 or R4R5 = (un) substituted 5- or 6-membered heterocyclic ring]. A list of 29 compds. is claimed, and their prepn. is described. For example, Et 7-hydroxy-4-oxo-4H-chromene-2-carboxylate underwent a sequence of: (1) complete hydrogenation of the enone (98%), (2) etherification of the alc. with PhCH2O(CH2)3Br (66%), (3) alpha ethylation of the ester (70%), (4) hydrogenolytic debenzylation (100%), (5) conversion of the resultant alc. to a bromide (96%), (6) etherification of the bromide with 3-(trifluoromethyl)-7-propyl-6hydroxybenz[4,5]isoxazole (85%), and (7) alk. hydrolysis (100%), to give title compd. II. PPAR binding assays using human recombinant PPAR are described without data. Co-administration of compds. I with a variety of other drug categories, including a no. of specific drugs, is claimed.

ANSWER 5 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:516582 CAPLUS

DOCUMENT NUMBER: 137:87495

Radiopharmaceuticals for imaging infection and TITLE:

inflammation

Barrett, John A.; Cheesman, Edward H.; Harris, Thomas INVENTOR(S):

D.; Liu, Shuang; Rajopadhye, Milind; Sworin, Michael

Bristol-Myers Squibb Pharma Company, USA PATENT ASSIGNEE(S):

U.S., 128 pp. SOURCE:

CODEN: USXXAM Patent DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE \_ \_ \_ \_ \_\_\_\_\_ US 1997-943659 19971003 US 6416733 В1 20020709 US 1996-27955P P 19961007 PRIORITY APPLN. INFO.:

MARPAT 137:87495 OTHER SOURCE(S):

206268-03-3, 2H-1-Benzopyran-2-carboxylic acid,

7-[3-[[5-ethyl-4'-fluoro-2-(phenylmethoxy)[1,1'-biphenyl]-4-

yl]oxy]propoxy]-3,4-dihydro-8-propyl-

RL: RCT (Reactant); RACT (Reactant or reagent)

(for prepn. of leukotriene antagonist ligands and their 99mTc complexes for imaging and treatment of infection and inflammation)

206268-03-3 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-[[5-ethyl-4'-fluoro-2-CN

(phenylmethoxy) [1,1'-biphenyl]-4-yl]oxy]propoxy]-3,4-dihydro-8-propyl-

(9CI) (CA INDEX NAME)

The present invention provides novel radiopharmaceuticals useful for the AB diagnosis of infection and inflammation, reagents and kits useful for prepg. the radiopharmaceuticals, methods of imaging sites of infection and/or inflammation in a patient, and methods of diagnosing diseases assocd. with infection or inflammation in patients in need of such diagnosis. The radiopharmaceuticals bind in vivo to the leukotriene B4 (LTB4) receptor on the surface of leukocytes which accumulate at the site of infection and inflammation. The reagents provided by this invention are also useful for the treatment of diseases assocd. with infection and inflammation. Thus, the leukotriene antagonist (I) was prepd. and shown to be active in an LTB4 human neutrophil (PMN) binding assay. Compd. I was used to prep. 99mTc(tricine)(TPPTS)(4-ethyl-2-(4-fluorophenyl)-[5-[5,5-dimethyl-6-[[6diazenido-3-pyridinyl]carbonyl]amino]hexyl]oxy]phenol) (TPPTS = tri(3-sulfonatophenyl)phosphine, sodium salt) which was used to detect inflammation/infection in quinea pig and rabbit focal infection models. REFERENCE COUNT: THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS 58 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:256251 CAPLUS

DOCUMENT NUMBER: 136:279341

DOCUMENT NUMBER: 136:279341

TITLE: Praparation of benzopyrancarboxylic acid derivatives

for the treatment of diabetes and lipid

disorders

INVENTOR(S): Sahoo, Soumya P.; Koyama, Hiroo; Miller, Daniel J.;

Boueres, Julia K.; Desai, Ranjit C.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                       KIND
                              DATE
                                              APPLICATION NO. DATE
     WO 2002026729
                        A2
                              20020404
                                              WO 2001-US29456 20010921
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
              UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001092874
                        A5
                              20020408
                                              AU 2001-92874
                                                                 20010921
     US 2002082292
                        Α1
                              20020627
                                              US 2001-961841
                                                                 20010924
                                           US 2000-235708P P 20000927
PRIORITY APPLN. INFO.:
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OTHER SOURCE(S): MARPAT 136:279341

TT 406488-39-9P 406488-40-2P 406488-42-4P 406488-43-5P 406488-44-6P 406488-45-7P

406488-46-8P 406488-47-9P 406488-48-0P

406488-49-1P 406488-50-4P 406488-51-5P 406488-56-0P 406488-58-2P 406488-59-3P

406488-60-6P 406488-61-7P 406488-62-8P 406488-63-9P 406488-64-0P 406488-65-1P

406488-66-2P 406488-67-3P 406488-68-4P

406488-69-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzopyrancarboxylic acid derivs. for treatment of diabetes and lipid disorders)

RN 406488-39-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-(4-phenoxy-2-propylphenoxy)propoxy]- (9CI) (CA INDEX NAME)

RN 406488-40-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-(4-phenoxy-2-propylphenoxy)propoxy]-2-propyl- (9CI) (CA INDEX NAME)

RN 406488-42-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[4-(4-phenoxy-2-propylphenoxy)butoxy]- (9CI) (CA INDEX NAME)

RN 406488-43-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-2-methyl-7-[4-(4-phenoxy-2-propylphenoxy)butoxy] - (9CI) (CA INDEX NAME)

$$n-Pr$$
 $O-(CH_2)_4-O$ 
 $CO_2H$ 

RN 406488-44-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(4-chlorophenoxy)-2-propylphenoxy]propoxy]-2-ethyl-3,4-dihydro- (9CI) (CA INDEX NAME)

$$C1$$
 $O-(CH_2)_3-O$ 
 $Et$ 

RN 406488-45-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-7-[3-[4-(4-fluorophenoxy)-2-propylphenoxy]propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 406488-46-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[3-[4-(4-methoxyphenoxy)-2-propylphenoxy]propoxy]- (9CI) (CA INDEX NAME)

RN 406488-47-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[3-(4-phenoxyphenoxy)propoxy]- (9CI) (CA INDEX NAME)

RN 406488-48-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[3-[4-[4-(methylsulfonyl)phenoxy]-2-propylphenoxy]propoxy]- (9CI) (CÀ INDEX NAME)

RN 406488-49-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[3-[4-[4-(2-methylpropyl)phenoxy]-2-propylphenoxy]propoxy]- (9CI) (CA INDEX NAME)

RN 406488-50-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[2-(4-phenoxy-2-propylphenoxy)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{n-Pr} \\ \text{O-CH}_2\text{-CH}_2\text{-O-Et} \\ \end{array}$$

RN 406488-51-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-3,4-dihydro-7-[2-[4-[4-(methylsulfonyl)phenoxy]-2-propylphenoxy]ethoxy]- (9CI) (CA INDEX NAME)

RN 406488-56-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-phenoxyphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 406488-58-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-

phenoxyphenoxy)propoxy]-3,4-dihydro-2-methyl- (9CI) (CA INDEX NAME)

$$C1$$
 $O-(CH_2)_3-O$ 
 $O$ 
 $CO_2H$ 

RN 406488-59-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-phenoxyphenoxy)propoxy]-2-ethyl-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 406488-60-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy]-3,4-dihydro-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Cl} & \\ & \text{O- (CH}_2)_3 - \text{O} & \\ \end{array}$$

RN 406488-61-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy]-2-ethyl-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 406488-62-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy]-3,4-dihydro-2-propyl- (9CI) (CA INDEX NAME)

RN 406488-63-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 2-ethyl-7-[3-(2-fluoro-4-phenoxyphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 406488-64-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy]-2-[(4-fluorophenyl)methyl]-3,4-dihydro-(9CI) (CA INDEX NAME)

RN 406488-65-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-phenoxyphenoxy)propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 406488-66-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

F 
$$O$$
  $CH_2)_3$   $O$   $CO_2H$ 

RN 406488-67-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(2-chloro-4-phenoxyphenoxy)propoxy]-2-ethyl-3,4-dihydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 406488-68-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-chloro-4-(4-fluorophenoxy)phenoxy]propoxy]-2-ethyl-3,4-dihydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 406488-69-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[4-[4-(2-methylpropyl)phenoxy]-2-propylphenoxy]propoxy]-2-propyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

GΙ

AB Title compds. [I; R = H, CH3CH2, CH3(CH2)2; R1 = CH3(CH2)2, Cl, F; R2 = H, F, (CH3)2CHCH2, Cl, OCH3, CH3SO2; n = 2, 3, 4], pharmaceutically acceptable salts, and stereoisomers are prepd. Title compds. I, with effective amt. of one or more compds. selected from the group consisting of glitazones, tolbutamide, lovastatin, etc., are potent agonists of PPAR alpha and/or gamma, and are therefore useful in the treatment, control or prevention of non-insulin dependent diabetes mellitus (NIDDM), hyperglycemia, dyslipidemia, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, atherosclerosis, obesity, vascular restenosis, inflammation, and other PPAR alpha and/or gamma mediated diseases, disorders and conditions.

Ι

L4 ANSWER 7 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:372369 CAPLUS

DOCUMENT NUMBER: 134:366684

TITLE: Preparation of [(phenoxyalkoxy)phenoxy]benzoates and

analogs for reversal of multidrug resistance

INVENTOR(S): Jedlitschky, Gabriele; Leier, Inka; Keppler, Dietrich

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: U.S., 28 pp., Cont.-in-part of U.S. 5,543,428.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA'	PATENT NO.				ND	DATE			A	PPLI	CATIO	ои ис	ο.	DATE					
US	6235	785	5 B:			31 20010522			US 1997-793659 1997022										
			Α			1996	0806		U	0831									
DE	4432	563		A1		1996	0314		D	E 19:	94-4	4325	63	1994	0913				
	DE 4432563							DE 1994-4432563 19940913											
	WO 9606604								W	0 19	1995	50831							
_	WO 9606604												_						
								BY.	CA.	CH.	CN.	CZ.	DK.	EE,	ES.	FI.	GB.		
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	RW:	•		SD.	SZ.	UG.	AT.	BE.	CH.	DE.	DK.	ES.	FR.	GB,	GR.	IE.	IT.		
	•	•	•	•		•	•	•	•		•		•	GN,		•	-		
			TD,		/	,	/	,	<b>U</b> ,		<b>U</b> _/	J ,	<b></b> ,	02.7	,	,	,		
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PRIORIT														1994					
				•										1994					
														1995					
														1997					
0.00V.DD 0.0		/a\													-20				

OTHER SOURCE(S): MARPAT 134:366684

## IT 152608-30-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of [(phenoxyalkoxy)phenoxy]benzoic acids and analogs for identification and treatment of multi-drug resistant tumors)

RN 152608-30-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-4'-fluoro-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

## IT 120072-59-5

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of [(phenoxyalkoxy)phenoxy]benzoic acids and analogs for identification and treatment of multi-drug resistant tumors)

RN 120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GΙ

R1Z1O(CH2)nOZOR [I; R = (un)substituted C6H4CO2H; R1 = (halo)phenyl; Z = AΒ 2-(un) substituted 1,3-phenylene; Z1 = 3-alkyl-(un) substituted 1,4-phenylene; n = 3-5] were prepd. Thus, 2,6-(HO) 2C6H3Pr was etherified by 2-IC6H4CO2Me and the product etherified by PhZ1O(CH2)3Cl (Z1 = 6-benzyloxy-3-ethyl-1,4-phenylene) to give, in 2 addnl. steps, title compd. II. Data for biol. activity of I were given. .
ENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:209933 CAPLUS

DOCUMENT NUMBER:

132:246369

TITLE:

Use of non-peptidyl compounds for the treatment of

insulin-related ailments

INVENTOR(S):

Helmerhorst, Erik; Plewright, Brian Scott Curtin University of Technology, Australia

PATENT ASSIGNEE(S):

PCT Int. Appl., 129 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA.	PATENT NO.				KIND DATE				APPLICATION NO. DATE										
										-										
	WO	NO 2000016798			A:	1	20000330			WO 1999-AU786 19990917 '										
		W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,		
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,		
			IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,		
			MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,		
			SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,		
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM											
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,		
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,		
			CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						
	ΑU	9960	707		A:	1 :	2000	0410		AU 1999-60707 19990917										
	EP	1115	422		A:	1 :	2001	0718		E	P 19	99-9	47113	3	19990917					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			ΙE,	SI,	LT,	LV,	FI,	RO												
PRIO	RITY	APP	LN.	INFO	. :				7	AU 1	998-	6091		Α	1998	922				
									7	WO 1:	999-2	AU78	5	W	19990	917				

OTHER SOURCE(S): MARPAT 132:246369

IT 120072-59-5 147612-00-8 152608-30-5

156005-27-5 156005-50-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(non-peptidyl compds. modulating insulin activity by mimicking amino acid residues spatially located on insulin and binding to insulin receptors)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 147612-00-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-ethoxy-2-ethyl-5-hydroxyphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

HO 
$$O-(CH_2)_3-O$$
  $O-CO_2H$ 

RN 152608-30-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-4'-fluoro-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

FOR 
$$CO_2H$$

RN 156005-27-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-ethyl-5-hydroxy-4-(1H-pyrazol-3-yl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-2-ethyl-5-hydroxyphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

The present invention relates to the use of at least a non-peptidyl compd. AB as a biol. modulator of insulin activity or insulin-related activity for the treatment of insulin-related diseases. Non-peptidyl compds. of the present invention exert their effects by mimicking amino acids spatially located on insulin, enabling those compds. to bind to the insulin receptor or insulin-like receptor causing biol. modulation of the activity of the receptor. A method for identifying a non-peptidyl compd. comprises the steps of: (1) comparing the 3D structure of the non-peptidyl compd. with a 3D pharmacophore of an active site of insulin, and (2) selecting a non-peptidyl compd. The compds. may act either as agonists or antagonists of insulin or insulin-like activity. Pharmaceutical compns. contq. chem. compds. capable of modulating the biol. activity of insulin are also claimed. For example, 4,4'-methylenebis[3-hydroxy-2naphthalenecarboxylic acid] (IM 025) was an antagonist of insulin action. IM 025 caused a dose-dependent decrease in the incorporation of 32P into FYF peptide in insulin-stimulated tubes and inhibited glucose transport in 3T3L1 cells, with IC50 of 150 and 170 .mu.M, resp. 2,4-Dichloro-6-[N-(trifluoromethanesulfonyl)sulfamoylphenyl-3,5-dichloro-2-hydroxybenzene] sulfonate (IM 103) was an agonist of insulin action displaying a biphasic biol. dose response curve with an apex at concn. of 110 .mu.M and an apparent EC50 of 45 .+-. 7 .mu.M.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:239130 CAPLUS

DOCUMENT NUMBER: 128:303347

TITLE: Radiopharmaceuticals for imaging infection and

inflammation

INVENTOR(S): Barrett, John Andrew; Cheesman, Edward Hollister;

Harris, Thomas David; Rajopadhye, Milind Du Pont Merck Pharmaceutical Company, USA

SOURCE: PCT Int. Appl., 352 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO. KIND						DATE APPLICATION NO. DATE												
WO	9815	9815295 A2			2	1998	80416 WO 1997-US18096 19971006											
WO	9815	295	A3			1998	0827											
	W:	AM,	AU,	ΑZ,	BR,	BY,	CA,	CN,	CZ,	EE,	HU,	IL,	JP,	KG,	KR,	ΚZ,	LT,	
		LV,	MD,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	TJ,	TM,	UA,	VN,	AM,	
		AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM									
	RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE
ΑU	9852	381		A:	1	1998	0505		AU 1998-52381 19971006									
ΑU	7364	81		B	2	2001	0726											
BR	9712	281		Α		1999	0831	BR 1997-12281 19971006										
CN	1239	895		Α		1999	1229		Cl	N 199	97-1	3034	2	1997	1006			

20000517 EP 1997-947259 19971006 EP 999856 A2 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001525796 T2 20011211 JP 1998-517680 19971006 ZA 1997-8956 19971007 ZA 9708956 Α 19990416 KR 1999-702953 19990406 20000725 KR 2000048922 Α US 1996-726507 PRIORITY APPLN. INFO.: Α 19961007 WO 1997-US18096 W 19971006

OTHER SOURCE(S):

MARPAT 128:303347

IT 206268-03-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(for prepn. of leukotriene antagonist ligands and their 99mTc complexes
for imaging and treatment of infection and inflammation)

RN 206268-03-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[[5-ethyl-4'-fluoro-2-(phenylmethoxy)[1,1'-biphenyl]-4-yl]oxy]propoxy]-3,4-dihydro-8-propyl-(9CI) (CA INDEX NAME)

GI

AB The present invention provides novel radiopharmaceuticals useful for the diagnosis of infection and inflammation, reagents and kits useful for prepg. the radiopharmaceuticals, methods of imaging sites of infection and/or inflammation in a patient, and methods of diagnosing diseases assocd. with infection or inflammation in patients in need of such diagnosis. The radiopharmaceuticals bind in vivo to the leukotriene B4 (LTB4) receptor on the surface of leukocytes which accumulate at the site of infection and inflammation. The reagents provided by this invention are also useful for the treatment of diseases assocd. with infection and inflammation. Thus, the leukotriene antagonist (I) was prepd. and shown to be active in an LTB4 human neutrophil (PMN) binding assay. Compd. I was used to prep. 99mTc(tricine)(TPPTS)(4-ethyl-2-(4-fluorophenyl)-[5-[5,5-dimethyl-6-[[6diazenido-3-pyridinyl]carbonyl]amino]hexyl]oxy]phenol) (TPPTS = tri(3-sulfonatophenyl)phosphine, sodium salt) which was was used to detect inflammation/infection in guinea pig and rabbit focal infection models.

L4 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:557660 CAPLUS

DOCUMENT NUMBER:

127:239120

TITLE:

Compositions comprising a cyclooxygenase-2 inhibitor

and a leukotriene B4 receptor antagonist for reducing

transplant rejection

INVENTOR(S):

PATENT ASSIGNEE(S):

Gregory, Susan A.; Isakson, Peter C.; Anderson, Gary G.D. Searle & Co., USA; Gregory, Susan A.; Isakson,

Peter C.; Anderson, Gary

SOURCE:

PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	CENT I	NO.		KIND DATE						PPL:	[CAT	ION N	ο.	DATE				
	WO	9729	 775		A1 19970821					W	0 1	997-1	JS142	2	1997	0211			
		W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	ВG,	BR	, BY	, CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FI,	GB,	GE,	HU,	IL,	IS	, JP	, KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK	, MN	, MW,	MX,	NO,	NZ,	PL,	PT,	
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	ТJ,	TM	, TR	, TT,	UA,	UG,	υs,	UZ,	VN,	
			YU,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ	, TM							
		RW:	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	AT,	ΒE,	CH	, DE	, DK,	ES,	FI,	FR,	GB,	GR,	
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ	, CF	, CG,	CI,	CM,	GΑ,	GN,	ML,	
			MR,	NE,	SN,	TD,	TG												
	CA	2246	356		A.	A	1997	0821		C	A 1:	997-2	22463	56	1997	0211			
	ΑU	9722	500		A	L	1997	0902		Α	U 1	997-	22500		1997	0211			
	ΕP	8803	62		A:	L	1998	1202		E	P 1	997-	90566	3	1997	0211			
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT	, LI,	LU,	NL,	SE,	PT,	ΙE,	FI
	JP	2000	5054	45	T	2	2000	0509		J	P 1	997-	52935	9	1997	0211			
	US	6172	096		В:	L	2001	0109		U	S 1	998-	75633		1998	0511			
PRIOR	(TI	APP	LN.	INFO	. :				,	US 1	996	-600	580	<b>A1</b>	1996	0213			
										WO 1	997	-US1	422	W	1997	0211			

## OTHER SOURCE(S):

MARPAT 127:239120

120072-59-5, SC-41930 162153-46-0, SC 52798

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(compns. comprising a cyclooxygenase-2 inhibitor and a leukotriene B4 receptor antagonist for reducing transplant rejection)

RN120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN propylphenoxy) propoxy] - 3, 4 - dihydro - 8 - propyl - (9CI) (CA INDEX NAME)

RN 162153-46-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

AB Treatment with a cyclooxygenase-2 inhibitor and a leukotriene B4 receptor antagonist is described as being useful in reducing recipient rejection of transplanted organs and for treatment of autoimmune diseases.

L4 ANSWER 11 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1997:175052 CAPLUS

DOCUMENT NUMBER:

126:166481

TITLE:

Combination of a cyclooxygenase-2 inhibitor and a leukotriene B4 receptor antagonist for the treatment

of inflammations

INVENTOR(S):

Isakson, Peter C.; Anderson, Gary D.; Gregory, Susan

Α.

PATENT ASSIGNEE(S):

G.D. Searle & Co., USA PCT Int. Appl., 72 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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PATENT NO.
                              KIND
                                      DATE
                                                           APPLICATION NO.
                                                                                  DATE
                              ----
                                                           WO 1996-US9905
      WO 9641645
                               A1
                                      19961227
                                                                                  19960611
            W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
                  SE, SG
            RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
      CA 2224563
                                      19961227
                                                           CA 1996-2224563 19960611
                               AA
      AU 9662694
                               A1
                                      19970109
                                                           AU 1996-62694
                                                                                  19960611
      EP 833664
                               A1
                                      19980408
                                                           EP 1996-921477
                                                                                  19960611
            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                                      19990706
                                                           JP 1996-503237
                                                                                  19960611
      JP 11507669
                               T2
PRIORITY APPLN. INFO.:
                                                       US 1995-489415
                                                                              Α
                                                                                  19950612
                                                       WO 1996-US9905
                                                                              W
                                                                                 19960611
```

OTHER SOURCE(S):

MARPAT 126:166481

IT **120072-59-5**, SC-41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of a cyclooxygenase-2 inhibitor and a leukotriene B4 receptor antagonist for treatment of inflammation)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB Combinations of a cyclooxygenase-2 inhibitor and a leukotriene B4 receptor antagonist are described for treatment of inflammation and inflammation-related **disorders**. The cyclooxygenase-2 inhibitors were prepd. Also, formulations for the drug combination are described.

L4 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:53684 CAPLUS

DOCUMENT NUMBER: 126:74591

TITLE: Preparation of biphenylyloxyalkylarenes as leukotriene

antagonists for the treatment or prevention of

Alzheimer's disease.

INVENTOR(S): Altstiel, Larry Douglas; Fleisch, Jerome Herbert

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA SOURCE: Eur. Pat. Appl., 124 pp.

CODEN: EPXXDW

Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Pi	ATENT	NO.		KIND DATE					A.	PPLI	CATI	ои ис	٥.	DATE						
-								-												
E	7430	743064			A1 19961120				E	P 19	96-3	0334	5	1996	0513					
	R:	ΑT,	BE,	CH,	`DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,	ΝL,	PT,	SE		
W	9636347			A1 19961121					W	0 19:	96-U	S677	3	1996	0513					
	W:	AL,	AM,	AU,	ΑZ,	BB,	ВG,	BR,	BY,	CA,	CN,	CZ,	EE,	GE,	HU,	IS,	JP,			
		KE,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,	LS,	LT,	LV,	MD,	MG,	MK,	MN,	MW,	MX,			
		NO,	NZ,	PL,	RO,	RU,	SD,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	UG,	UZ,			
		VN,	AM																	
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,			
		NE,	SN,	TD,	TG															
IA	AU 9658572				A1 19961129				AU 1996-58572						0513	3				
PRIORI'	. :	:				US 1995-443179						0517	,							
								1	WO 1:	996-1	JS67	73		1996	0513					

OTHER SOURCE(S): MARPAT 126:74591

IT 152608-29-2P 152608-30-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of biphenylyloxyalkylarenes as leukotriene antagonists for the treatment or prevention of Alzheimer's **disease**)

RN 152608-29-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

HO 
$$O-(CH_2)_3-O$$
  $O-CO_2H$ 

RN 152608-30-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-4'-fluoro-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OH} & \text{O-} \text{(CH}_2)_3 - \text{O} & \text{CO}_2\text{H} \\ & & \text{Et} & & \end{array}$$

GΙ

$$R^2$$
 HO  $XYZAR^4$   $R^3$   $R^1$   $I$ 

F—O(
$$CH_2$$
) 30—OH II

AB Use of compds. having leukotriene antagonist activity, e.g., title compds. [I; R1 = alkyl, alkenyl, alkynyl, alkoxy, alkylthio, halo, R2-substituted Ph; R2, R3 = H, halo, OH, alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, CF3, dialkylamino; X = O, S, CO, CH2; Y = O, CH2; XY = CH:CH, C.tplbond.C; Z = alkylene; A = bond, O, S, CH:CH, etc.; R4 = (substituted) (hetero)aryl; with provisos] for manuf. of a medicament for treating or preventing Alzheimer's disease is claimed. Thus, 5-hydroxybenzopyran-2-one and 3-(2-ethyl-4-(4-fluorophenyl)-5-benzyloxyphenyl)propyl iodide were stirred with NaH in Me2SO to give 5-[3-(2-ethyl-4-(4-fluorophenyl)-5-benzyloxyphenyl)propoxy]benzopyran-2-one. This was converted to title compd. (II), which displaced [3H]-LTB4 from guinea pig lung membrane prepns. with pKi = 9.01. I drug formulations are given.

L4 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:658895 CAPLUS

DOCUMENT NUMBER: 125:325054

TITLE: Study on the experimental ulcerative colitis (UC)

model induced by dextran sulfate sodium (DSS) in rats.

2

AUTHOR(S): Kimura, Isami; Nagahama, Shinobu; Kawasaki, Maki;

Kataoka, Mikiko; Sato, Makoto

CORPORATE SOURCE: Preclin. Dev. Lab., Nippon Hoechst Marion Roussel

Ltd., Shiga, 520-23, Japan

SOURCE: Nippon Yakurigaku Zasshi (1996), 108(5), 259-266

CODEN: NYKZAU; ISSN: 0015-5691

PUBLISHER: Nippon Yakuri Gakkai

DOCUMENT TYPE: Journal LANGUAGE: Japanese

IT 120072-59-5, SC-41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(inflammatory mediators in dextran sulfate-induced ulcerative colitis)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB We have already confirmed that symptoms in the exptl. UC model in rats induced by ingesting DSS resembled those of human UC. To clarify the participation of chem. mediators concerned with the development and etiol. of the exptl. UC model, we investigated the effects of superoxide dismutase (SOD), 5-aminosalicylic acid (5-ASA), AA-861, and LTB4-receptor antagonist (LTB4-ra), indomethacin (Ind) and OKY-046 on the DSS-induced UC model in rats. The UC model was produced by giving rats drinking water contg. 3% DSS, and animals were selected when bloody stool was obsd. in more than 90% of the animals. After selection, drugs were intrarectally administered once a day, for 7 days, to UC rats that were given drinking water contg. 1% DSS. SOD, 5-ASA, AA-861 and LTB4-ra inhibited the formation of erosions in the large intestine. Furthermore, SOD, 5-ASA and LTB4-ra improved the length of the large intestine of rats that had been shortened by ingesting DSS. On the other hand, neither Ind nor OKY-046 improved the shortening and erosion of the large intestine. From these results, it is concluded that the free radical and lipoxygenase metabolites of arachidonic acid may be partially involved in the DSS-induced UC model in rats.

L4 ANSWER 14 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:194704 CAPLUS

DOCUMENT NUMBER: 124:260839

TITLE: Leukotriene B4 antagonists

INVENTOR(S): Djuric, Stevan Wakefield; Yu, Stella Siu-Tzyy

PATENT ASSIGNEE(S): G.D. Searle and Co., USA SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KI	IND DATE				A.	PPLI	CATI	ON NO	٥.	DATE					
	WO 9533742				A1 19951214						0 19	95-U	S670	2	1995	0531				
		W:	AM,	AT,	AU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	ES,	FI,		
			GB,	GE,	HU,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LK,	LR,	LT,	LU,	LV,	MD,		
			MG,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	ΤJ,		
			TM,	TT																
		RW:	KE,	MW,	SD,	SZ,	ŬĠ,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,		
			LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE,		
			SN,	TD,	TG															
	US	5516	917		Δ 19960514					IIS 1994-255275 19940608										

AU 9526523 A1 19960104 AU 1995-26523 19950531 US 5684162 A 19971104 US 1996-605732 19960222 PRIORITY APPLN. INFO:: US 1994-255275 19940608 WO 1995-US6702 19950531

OTHER SOURCE(S): MARPAT 124:260839

IT 120072-59-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GΙ

AB The title compds. I (R = H, o-, p-Me) were prepd. by amidation of the propionic acid deriv. with RC6H4SO2NH2. Compds. I are leukotriene B4 antagonists and are useful as anti-inflammatory agents and in treating disease conditions mediated by LTB4.

L4 ANSWER 15 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:175604 CAPLUS

DOCUMENT NUMBER: 124:232451

TITLE: Preparation of (azolylphenoxy)alkoxy-substituted

dihydrobenzopyran-2-sulfonimides derivatives as

leukotriene B4 antagonists

INVENTOR(S): Djuric, Stevan Wakefield; Penning, Thomas Dale

PATENT ASSIGNEE(S): G.D. Searle and Co., USA SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9532201 Al 19951130 WO 1995-US5850 19950517

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT

RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,

SN, TD, TG

AU 9525855 A1 19951218 AU 1995-25855 19950517 US 5578619 A 19961126 US 1995-569323 19951208 PRIORITY APPLN. INFO.: US 1994-249107 19940525 WO 1995-US5850 19950517

OTHER SOURCE(S): MARPAT 124:232451

IT 120072-59-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of [(azolylphenoxy)alkoxy]dihydrobenzopyran sulfonimide derivs.

as leukotriene B4 antagonists for treating inflammatory

diseases)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

IT 138828-39-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of [(azolylphenoxy)alkoxy]dihydrobenzopyran sulfonimide derivs.
as leukotriene B4 antagonists for treating inflammatory
diseases)

RN 138828-39-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$R^{10}$$
 $O$ 
 $(CH_2)_n$ 
 $O$ 
 $(CH_2)_pCONHSO_2R^2$ 
 $O$ 
 $(CH_2)_x$ 
 $O$ 
 $(CH_2)_x$ 

AΒ The title compds. [I; R = C2-6 alkyl, alkenyl, or alkynyl, (CH2)mR3; wherein R3 = C3-5 cycloalkyl; m = 1 or 2; R1 = C1-4 alkyl; R2 = C1-5 alkyl, aryl optionally substituted with halogen or C1-5 alkyl; R4 = C1-6 alkyl; n = 1-5; p = 0-6; x = 0 or 2; Y = NH, O, S; Z = H, C1-4 alkyl or alkoxy] and stereoisomers and pharmaceutically acceptable salts thereof, which are useful as antiinflammatory agents and in the treatment of leukotriene B4 mediated conditions such as inflammatory diseases including rheumatoid arthritis, psoriasis, inflammatory bowel disease, gout, asthma, and multiple sclerosis, are prepd. Thus, the benzopyrancarboxylic acid deriv. (II; R = CO2H) 15, PhSO2NH2 15, 4-dimethylaminopyridine 15, 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide 19 mg, and 5 mL CH2Cl2 were stirred with 4.ANG. mol. sieves at room temp. for 24 h to give, after flash chromatog., 29 mg the Ph sulfonimide II (R = CONHSO2Ph). The latter compd. and II (R = CH2CH2CONHSO2Ph) showed the leukotriene B4 receptor binding affinity 5.5 and 4.3 times, resp., greater than that of 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid.

L4 ANSWER 16 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:849927 CAPLUS

DOCUMENT NUMBER: 124:55467

AUTHOR(S):

DOCUMENT NUMBER: 124:55467

TITLE: Synthetic and Structure/Activity Studies on Acid-Substituted 2-Arylphenols: Discovery of 2-[2-Propyl-3-[3-[2-ethyl-4-(4-fluorophenyl)-5-hydroxyphenoxy]-propoxy]phenoxy]benzoic Acid, a

High-Affinity Leukotriene B4 Receptor Antagonist Sawyer, J. Scott; Bach, Nicholas J.; Baker, S. Richard; Baldwin, Ronald F.; Borromeo, Peter S.; Cockerham, Sandra L.; Fleisch, Jerome H.; Floreancig,

II

Paul; Froelich, Larry L.; et al.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46285, USA

SOURCE: Journal of Medicinal Chemistry (1995), 38(22), 4411-32

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

## IT 120072-59-5P 152608-29-2P 152608-30-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(structure-activity relationship of [hydroxy[[(tetrazolyl)alkyl]oxy]phe nyl]ethanone derivs. and analogs)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 152608-29-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

HO 
$$O-(CH_2)_3-O$$
  $O-CO_2H$ 

RN 152608-30-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-4'-fluoro-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB Structural derivs. of LY255283 have been studied as receptor antagonists of leukotriene B4. Substitution of the 2-hydroxyacetophenone subunit of 1-[5-Ethyl-2-hydroxy-4-[[6-methyl-6-(1H-tetrazol-5yl)heptyl]oxy]phenyl]ethanone (LY255283) with a 2-arylphenol group provided entry into several new series that feature various mono- and diacidic core functionality. These new analogs, the subject of a broad structure-activity investigation, displayed significantly increased in vitro and in vivo activity as receptor antagonists of LTB4. A series of diaryl ether carboxylic acids demonstrated esp. interesting activity and led to the discovery of 2-[2-propyl-3-[3-[2-ethyl-4-(4-fluorophenyl)-5hydroxyphenoxy]propoxy]phenoxy]benzoic acid (LY293111), a 2-arylphenol-substituted diaryl ether carboxylic acid which displayed potent binding to human neutrophils (IC50 = 17 .+-. 4.6 nM) and guinea pig lung membranes (IC50 = 6.6 .+-. 0.71 nM), inhibition of LTB4-induced expression of the CD11b/CD18 receptor on human neutrophils (IC50 = 3.3 .+-. 0.81 nM), and inhibition of LTB4-induced contraction of guinea pig lung parenchyma (pKB = 8.7 .+-. 0.16). 801Vivo, LY293111 demonstrated potent activity in inhibiting LTB4-induced airway obstruction in the

guinea pig when dosed by the oral (ED50 = 0.40 mg/kg) or i.v. (ED50 = 0.014 mg/kg) routes. A specific LTB4 receptor antagonist, LY293111 had little effect on inhibiting contractions of guinea pig lung parenchyma induced by leukotriene D4 (LTD4), histamine, carbachol, or U46619. LY293111 was chosen as a clin. candidate and is currently in phase I studies for a variety of inflammatory diseases.

ANSWER 17 OF 48 CAPLUS COPYRIGHT 2002 ACS 1995:792781 CAPLUS ACCESSION NUMBER: 123:188623 DOCUMENT NUMBER: Use of PLA2 inhibitors as treatment for Alzheimers TITLE: disease Clemens, James Allen; Sofia, Michael Joseph; INVENTOR(S): Stepenson, Diane Teresa Lilly, Eli, and Co., USA PATENT ASSIGNEE(S): PCT Int. Appl., 91 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE PATENT NO. APPLICATION NO. DATE A1 19950629 ----------WO 1994-US14504 19941214 WO 9517183 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 5478857 19951226 US 1993-173544 19931223 CA 2179649 AA19950629 CA 1994-2179649 19941214 AU 9514028 A1 19950710 AU 1995-14028 19941214 AU 688446 B2 19980312 19961009 EP 735870 **A**1 EP 1995-905404 19941214 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE CN 1994-195027 19941214 19970212 CN 1142768 A HU 75335 19970528 HU 1996-1741 19941214 A2 T2 JP 09507069 19970715 JP 1994-517514 19941214 A BR 9408407 19970805 BR 1994-8407 19941214 A A A A 19960618 ZA 1994-10041 19941215 ZA 9410041 19961008 US 1995-464030 19950605 US 5563164 19960809 NO 1996-2568 19960617 NO 9602568 FI 1996-2557 FI 9602557 19960822 19960619 US 1993-173544 PRIORITY APPLN. INFO.: 19931223 WO 1994-US14504 19941214 OTHER SOURCE(S): MARPAT 123:188623 147612-00-8P 152608-30-5P 156005-50-4P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (phospholipase A2 inhibitors for treatment of Alzheimers

disease)
RN 147612-00-8 CAPLUS

CN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-ethoxy-2-ethyl-5-hydroxyphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

HO 
$$O-(CH_2)_3-O$$
  $O-CO_2H$  Et

RN 152608-30-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[(5-ethyl-4'-fluoro-2-hydroxy[1,1'-biphenyl]-4-yl)oxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 156005-50-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-2-ethyl-5-hydroxyphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

HO O- 
$$(CH_2)_3$$
-O-  $CO_2H$ 

Ac Et

GI

F-p-C<sub>6</sub>H<sub>4</sub>

$$O = CH_2$$
 $O = CH_2$ 
 $O = CO_2H$ 
 $O = CO_2H$ 

AB This invention provides methods for the treatment or prevention of Alzheimer's disease in a mammal which comprises administering to a mammal in need thereof an effective amt. of an inhibitor of phospholipase A2 (PLA2), esp. cytosolic PLA2. E.g., I was prepd. and shows good PLA2 inhibitory activity. Pharmaceutical formulations are also given.

L4 ANSWER 18 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:749667 CAPLUS

DOCUMENT NUMBER: 123:160397

TITLE: Otitis externa and anti-inflammatory activity of

SC-41930, a selective leukotriene B4 receptor

antagonist

AUTHOR(S): Sutbeyaz, Yavuz; Yakan, Birkan; Doner, Fehmi;

Ciftcioglu, Akif

CORPORATE SOURCE: Fac. Med., Ataturk Univ., Erzurum, Turk.

SOURCE: Turkish Journal of Medical Sciences (1995), 24(2),

129-32

CODEN: TJMEEA; ISSN: 1300-0144

PUBLISHER: Scientific and Technical Research Council of Turkey

DOCUMENT TYPE: Journal LANGUAGE: English

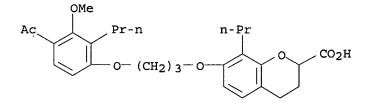
IT 120072-59-5, SC 41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(leukotriene B4 receptor antagonist SC-41930 inhibition of otitis externa)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)



AB Sensitized guinea pigs were injected i.p. with SC-41930. One hour later, intradermal injection of killed Staphylococcus aureus into the skin of the external auditory canal was performed. Twenty-four hours after inoculation, the animals were killed, and canal skins were isolated for histopathol. evaluation. Only mild inflammatory infiltration was obsd. in the SC-41930-treated group, whereas the controls showed severe inflammatory infiltration and also deterioration of the glandular structure. Thus, SC-41930 attenuates the acute inflammatory reaction of otitis externa.

L4 ANSWER 19 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:620228 CAPLUS

DOCUMENT NUMBER: 123:74426

TITLE: Blockade of human neutrophil activation by

2-[2-propyl-3-[3-[2-ethyl-4-(4-fluorophenyl)-5-

hydroxyphenoxy]propoxy]phenoxy]benzoic acid

(LY293111), a novel leukotriene B4 receptor antagonist AUTHOR(S): Marder, Philip; Sawyer, J. Scott; Froelich, Larry L.;

Mann, Larry L.; Spaethe, Stephen M.

CORPORATE SOURCE: Lilly Res. Lab., Indianapolis, IN, 46285, USA

SOURCE: Biochemical Pharmacology (1995), 49(11), 1683-90

CODEN: BCPCA6; ISSN: 0006-2952

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5, SC-41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(blockade of human neutrophil activation by leukotriene B receptor

antagonist LY293111 and comparison with SC-41930)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Ac 
$$OMe$$
  $Pr-n$   $n-Pr$   $O-(CH_2)_3-O$   $CO_2H$ 

Leukotriene B4 (LTB4), a naturally occurring pro-inflammatory product of AB arachidonic acid metab., has been assocd. with human inflammatory disease. This study compares the abilities of two LTB4 receptor antagonists, 2-[2-propyl-3-[3-[2-ethyl-4-(4-fluorophenyl)-5hydroxyphenoxy]-propoxy]phenoxy]benzoic acid (LY293111) and 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid (SC-41930), to displace LTB4 binding and their functional blockade of human neutrophil activation. LY293111 inhibited the binding of [3H]LTB4 with a Ki of 25 nM; SC-41930 displayed a similar potency (Ki = 17 nM). In contrast, LY293111 prevented LTB4-induced calcium mobilization with an IC50 = 20 nM, or 40 times more effectively than SC-41930 (IC50 = 808 nM). LY293111 was 300 times more potent than SC-41930 in blocking LTB4-induced CD11b up-regulation on isolated neutrophils. LY293111 also arrested LTB4-induced up-regulation of CD11b on neutrophils in whole human blood. LY293111 was not effective in blocking human neutrophil activation responses induced by N-formyl-methionyl-leucyl-phenylalanine (fMLP), platelet-activating factor (PAF), human recombinant endothelial interleukin-8 (IL-8) or human recombinant complement component 5a (C5a).

ANSWER 20 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:544212 CAPLUS

DOCUMENT NUMBER: 122:306099

TITLE: Antiinflammatory effects of second-generation

> leukotriene B4 receptor antagonist, SC-53228: impact upon leukotriene B4- and 12(R)-HETE-mediated events

AUTHOR(S): Fretland, D. J.; Anglin, C. P.; Bremer, M.; Isakson,

P.; Widomski, D. L.; Paulson, S. K.; Docter, S. H.;

Djuric, S. W.; Penning, T. D.; et al.

CORPORATE SOURCE: Department of Inflammatory Diseases Research, Searle

Research and Development, Chesterfield, MO, USA

SOURCE: Inflammation (New York, NY, United States) (1995),

19(2), 193-205

CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE: Journal LANGUAGE: English

120072-59-5, SC-41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiinflammatory effects: impact upon leukotriene B4- and

12(R)-HETE-mediated events)

120072-59-5 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Leukotriene B4 (LTB4) and 12(R)-hydroxyeicosatetraenoic acid [12(R)-HETE] AB are proinflammatory products of arachidonic acid metab. that have been implicated as mediators in a no. of inflammatory diseases. When injected intradermally into the guinea pig, LTB4 and 12(R)-HETE elicit a dose-dependent migration (chemotaxis) of neutrophils (PMNs) into the injection sites as assessed by the presence of a neutrophil marker enzyme myeloperoxidase. SC-41930 {7-[3-(4-acetyl-3-methoxy-2propylphenoxy) propoxyl] - 3,4-dihydro-8-propyl- 2H-1-benzopyran-2-carboxylic acid}, a first-generation LTB4 receptor antagonist, inhibited the chemotactic actions of LTB4 when given orally with an ED50 value of 1.7 mg/kg. The second-generation LTB4 receptor antagonist, SC-53228  $[(+)-(S)-7-(3-{2-(cyclopropylmethyl)-3-methoxy-4-[(methylamino)carbonyl]p}]$ henoxy}propoxy)-3,4-dihydro-8-propyl-2H-1-benzopyran-2-propanoic acid], inhibited LTB4-induced chemotaxis when given intragastrically with an ED50 value of 0.07 mg/kg. Furthermore, SC-53228 inhibited 12(R)-HETE-induced granulocyte chemotaxis with an oral ED50 value of 5.8 mg/kg. When dosed orally over a range of 0.03-100 mg/kg, SC-53228 gave Cmax plasma concns. of 0.015-41.1 .mu.g/mL. SC-53228 inhibited LTB4-primed membrane depolarization of human neutrophils with an IC50 value of 34 nM. potent LTB4 receptor antagonist, SC-53228 may well have application in the medical management of disease states such as asthma, rheumatoid arthritis, inflammatory bowel disease, contact dermatitis, and psoriasis, in which LTB4 and/or 12(R)-HETE are implicated as inflammatory mediators.

ANSWER 21 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:413307 CAPLUS DOCUMENT NUMBER: 122:230123 Second Generation Leukotriene B4 Receptor Antagonists TITLE: Related to SC-41930: Heterocyclic Replacement of the Methyl Ketone Pharmacophore Penning, Thomas D.; Djuric', Stevan W.; Miyashiro, AUTHOR (S): Julie M.; Yu, Stella; Snyder, James P.; Spangler, Dale; Anglin, Charles P.; Fretland, Donald J.; Kachur, James F.; et al. Department of Chemistry, Searle Research and CORPORATE SOURCE: Development, Skokie, IL, 60077, USA SOURCE: Journal of Medicinal Chemistry (1995), 38(6), 858-68 CODEN: JMCMAR; ISSN: 0022-2623 PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal LANGUAGE: English 137837-12-8P 138828-24-7P 138828-27-0P 138828-28-1P 138828-29-2P 138828-31-6P 138828-33-8P 138828-36-1P 138828-39-4P, SC 50605 138828-42-9P 138828-44-1P 138828-46-3P 138828-47-4P 152246-97-4P, SC 48928 162105-82-0P 162105-83-1P 162153-46-0P, SC 52798 162153-47-1P , SC 52799 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and structure activity relations of leukotriene B4 antagonist benzopyran carboxylic acid derivs.) RN137837-12-8 CAPLUS CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-

(1H-pyrazol-3-yl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

HN 
$$N \rightarrow 0$$
  $CO_2H$   $N \rightarrow 0$   $N$ 

RN 138828-24-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(4-oxazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-27-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-[(phenylmethyl)thio]-1H-imidazol-4-yl]-2-propylphenoxy]propoxy]-8-propyl-(9CI) (CA INDEX NAME)

$$Ph-CH_2-S$$
 $N$ 
 $MeO$ 
 $n-Pr$ 
 $O-(CH_2)_3-O$ 
 $CO_2H$ 

RN 138828-28-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[4-(1H-imidazol-4-yl)-3-methoxy-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-29-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(2-amino-4-thiazolyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$H_2N$$
 $N$ 
 $O-(CH_2)_3-O$ 
 $O-Pr$ 
 $O-Pr$ 
 $O-Pr$ 

RN 138828-31-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-(4-thiazolyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-33-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methyl-4-oxazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-36-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-(2-propenyl)-4-(4-thiazolyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 138828-39-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-42-9 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methoxy-4-thiazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeO 
$$\sim$$
 N  $\sim$  N

RN 138828-44-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(2,3-dihydro-2-thioxo-4-thiazoly1)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-46-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-(methylthio)-4-thiazolyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeS 
$$N$$
  $O-(CH_2)_3-O$   $O-Pr$   $O-CO_2H$   $N-Pr$ 

RN 138828-47-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-[(phenylmethyl)thio]-4-thiazolyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$Ph-CH_2-S$$
 $N$ 
 $S$ 
 $MeO$ 
 $n-Pr$ 
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 

RN 152246-97-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(aminocarbonyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $N-Pr$ 
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 

$$H_2N-C$$
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 
 $O-CO_2H$ 

RN 162105-82-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[4-(5-isoxazolyl)-3-methoxy-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

N MeO 
$$n-Pr$$
  $O-(CH_2)_3-O$   $O-CO_2H$ 

RN 162105-83-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-(1H-1,2,3-triazol-4-yl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H \\
N \\
N \\
MeO \\
n-Pr \\
\end{array}$$

$$\begin{array}{c}
n-Pr \\
O \\
CO_2H \\
\end{array}$$

RN 162153-46-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

RN 162153-47-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

The previous reports have highlighted the first-generation leukotriene B4 AB (LTB4) receptor antagonist SC-41930 (7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid) which has potent oral, topical, and intracolonic activity in various animal models of inflammation. Extensive structure-activity relation studies, in which a series of heterocyclic replacements for the Me ketone functional group of SC-41930 was explored, identified SC-50605 (7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid) as an optimized analog within a series of thiazoles. SC-50605 was significantly more potent than SC-41930 in LTB4 receptor binding, chemotaxis, and degranulation assays. It also displayed very good activity in animal models of colitis and epidermal inflammation by oral, topical, i.v., and intracolonic routes of administration. The resolved enantiomers of SC-50605 were obtained by chiral chromatog. and both demonstrated good in vitro and in vivo activity. The (+)-isomer (SC-52798) is currently being evaluated as a potential clin. candidate for psoriasis and ulcerative colitis therapy.

ANSWER 22 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1995:354656 CAPLUS

DOCUMENT NUMBER:

122:187398

TITLE:

Anti-inflammatory benzopyrans, compositions and method

of their use

INVENTOR(S):

Djuric, Stevan W.; Fretland, Donald J.; Yu, Stella S.

PATENT ASSIGNEE(S):

G. D. Searle and Co., USA

SOURCE:

U.S., 12 pp.

DOCUMENT TYPE:

CODEN: USXXAM

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_ \_ \_ \_ -----\_\_\_\_\_\_

US 5380740

19950110

US 1993-50109

19930428

OTHER SOURCE(S):

MARPAT 122:187398

IT 120072-38-0 120072-40-4 120072-59-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(benzopyran derivs. as LTB4 antagonists and antiinflammatory agents)

RN 120072-38-0 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-acetyl-2-(cyclopropylmethyl)-3-CN methoxyphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$CH_2$$
 $O-(CH_2)_3-O$ 
 $CO_2H$ 
 $AC$ 

RN 120072-40-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-acetyl-3-methoxy-2-(2-propenyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Ac 
$$CH_2-CH=CH_2$$
  $CH_2$   $CH_2$   $CH_2$ 

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

AB This invention encompasses compds. of the formula I [wherein R represents lower alkyl of 1 to 6 carbon atoms, lower alkenyl of 2 to 6 carbon atoms, or (CH2)mR3 wherein R3 represents cycloalkyl of 3 to 5 carbon atoms and m is 1, 2 or 3; R1 is CONH2 or CONHSO2R2 wherein R2 is lower alkyl, Ph, unsubstituted or substituted with lower alkyl, or II; and n is an integer from 2 to 5] and the stereoisomers and pharmaceutically acceptable salts thereof. The compds. are useful anti-inflammatory agents for treating, for example, inflammatory bowel disease, rheumatoid arthritis, gout, asthma and psoriasis. LTB4 receptor binding relative to 7-[3,(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-

1-benzopyran-2-carboxylic acid: 0.8-2.0 vs. 1 (where IC50 for the ref. compd. = 3 .times. 10-7 M). Pharmaceutical formulations were given.

ANSWER 23 OF 48 CAPLUS COPYRIGHT 2002 ACS L4

ACCESSION NUMBER:

1994:541719 CAPLUS

DOCUMENT NUMBER:

121:141719

TITLE:

Leukotriene B4 antagonists

INVENTOR(S):

Dillard, Robert D.; Sawyer, J. Scott; Sofia, Michael

PATENT ASSIGNEE(S):

Lilly, Eli, and Co., USA

SOURCE:

TT

U.S., 33 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5324743	A	19940628	US 1992-988615	19921210
US 5552441	Α	19960903	US 1994-195951	19940214
RITY APPLA. INFO.	:		US 1992-988615	19921210

OTHER SOURCE(S):

MARPAT 121:141719

155453-11-5P 156005-50-4P 157230-27-8P

RL: PREP (Preparation)

(prepn. and leukotriene B4 antagonist activity of)

RN155453-11-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-2-ethyl-5-CNhydroxyphenoxy)propoxy]-3,4-dihydro-8-propyl-, monosodium salt (9CI) INDEX NAME)

## Na

RN 156005-50-4 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-2-ethyl-5-CN hydroxyphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN157230-27-8 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-2-ethyl-5-CN hydroxyphenoxy)propoxy]-3,4-dihydro-6-iodo-8-propyl- (9CI) (CA INDEX NAME)

GI

MeCO 
$$OH$$
  $O$   $CO_2Me$   $O$   $CO_2Me$ 

AB This invention provides certain 1,2,4,5 substituted benzene derivs. contg. "acid" substituents derived from cyclic or hetercyclic moieties. These unique compds. are leukotriene B4 antagonists and formulation of these derivs., and a method of using these derivs. for the treatment of conditions characterized by an excessive release of leukotrienes. E.g., I was prepd. and incorporated into hard gelatin capsules. The leukotriene B4 antagonist activity of a no. of compds. was demonstrated.

Ι

L4 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:533968 CAPLUS

DOCUMENT NUMBER: 121:133968

TITLE: (Phenoxypropoxy) benzopyranpropanoates as

(phenoxypropoxy) benzopyranpropanoatesleukotriene B4

antagonists

INVENTOR(S): Djuric, Stevan W.; Docter, Stephen H.; Yu, Stella S.

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA

SOURCE: U.S., 27 pp. Cont.-in-part of U.S. 5,124,350.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				<b></b>
US 5310951	Α	19940510	US 1992-995859	19921223
US 5124350	A	19920623	US 1990-545430	19900628
AT 131165	E	19951215	AT 1991-916271	19910627
ES 2080334	Т3	19960201	ES 1991-916271	19910627
US 5439937	Α	19950808	US 1994-205909	19940303
US 5532383	Α	19960702	US 1995-445059	19950519
PRIORITY APPLN.	INFO.:		US 1990-545430	19900628
			US 1992-995859	19921223
			US 1994-205909	19940303

IT 157062-25-4P 157062-38-9P 157062-41-4P 157062-43-6P 157062-46-9P 157062-48-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as leukotriene antagonist)

RN 157062-25-4 CAPLUS RN 157062-38-9 CAPLUS RN 157062-41-4 CAPLUS

157062-43-6 CAPLUS RN 157062-46-9 CAPLUS RN 157062-48-1 CAPLUS RNGT

Two compds., 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-AB [(methylamino)carbonyl]phenoxy]propoxy]-3,4-dihydro-8-propyl-H-1benzopyran-2-propanoic acid, (+)-I and (-)-I, are claimed. I are leukotriene B4 antagonists and are useful as antiinflammatory agents and in treating disease conditions mediated by LTB4.

ANSWER 25 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1994:435262 CAPLUS

DOCUMENT NUMBER:

121:35262

TITLE:

Synthesis and pharmacological activity of SC-53228, a

I

leukotriene B4 receptor antagonist with high intrinsic

potency and selectivity

AUTHOR (S):

Djuric, Stevan W.; Docter, Stephen H.; Yu, Stella S.; Spangler, Dale; Tsai, Bie Shung; Anglin, Charles P.; Gaginella, Timothy S.; Kachur, James F.; Keith, Robert H.; et al.

CORPORATE SOURCE:

Searle R and D, Skokie, IL, 60077, USA

SOURCE:

Bioorganic & Medicinal Chemistry Letters (1994), 4(6),

811-16

CODEN: BMCLE8; ISSN: 0960-894X

DOCUMENT TYPE:

Journal

LANGUAGE:

English

120072-59-5, SC-41930 141059-14-5 141059-28-1 IT 152246-97-4, SC 48928 155878-64-1 155878-65-2

155878-66-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(leukotriene antagonist activity of)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-

propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 141059-14-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-[(methylamino)carbonyl]phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) INDEX NAME)

RN 141059-28-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[(methylamino)carbonyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{O} \\ \text{O} \end{array}$$

RN 152246-97-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(aminocarbonyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 
 $O-CO_2H$ 

RN 155878-64-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[[(1-methylethyl)amino]carbonyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CAINDEX NAME)

$$i-PrNH-C$$
 $n-Pr$ 
 $n-Pr$ 
 $n-Pr$ 
 $n-Pr$ 
 $n-Pr$ 

RN 155878-65-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-[(dimethylamino)carbonyl]-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$Me_2N-C$$
 $O-(CH_2)_3-O$ 
 $O-CO_2H$ 

RN 155878-66-3 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-(1-pyrrolidinylcarbonyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

GΙ

MeNHCO 
$$O(CH_2)_3O$$

AB The structure activity relationship (SAR) studies leading to the identification of a novel high potency Leukotriene B4 receptor antagonist SC-53228 (I) are delineated. This compd. shows excellent pharmacodynamic efficacy in animal models of inflammatory disease.

L4 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:95122 CAPLUS

DOCUMENT NUMBER: 120:95122

TITLE: Ocular antiinflammatory activity of SC-41930, a

specific leukotriene B4 receptor antagonist

AUTHOR(S): Kaya, Murat; Energin, Fethi; Mensiz, Ercan; Erim,

Adnan; Resi, Abdulkadir; Arseven, Gursel

CORPORATE SOURCE: Med. Fac., Ataturk Univ., Erzurum, Turk.

SOURCE: Turkish Journal of Medical Sciences (1993), 18(4),

295-301

CODEN: TJMEEA; ISSN: 1300-0144

DOCUMENT TYPE: Journal

LANGUAGE: English

IT **120072-59-5**, SC-41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiinflammatory activity of, in eye, leukotriene B4 receptor antagonism in relation to)

RN 120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Endogenous ocular inflammations are still major problems in ophthalmol. AB Recently attention was focussed on the 5-lipoxygenase product leukotriene B4 (LTB4) which is thought to be a prominent proinflammatory mediator in . acute inflammatory reactions. The authors evaluated the antiinflammatory efficacy of the leukotriene B4 receptor antagonist SC-41930 on ocular inflammation in rabbits. Animals were challenged in the anterior chamber 2 wk after a s.c. injection of staphylococcus antigens dissolved in Freund's Complete Adjuvant. In the exptl. group, IV administration of SC-41930 was given 30 min before and after anterior chamber challenge, while in the control group, sodium bicarbonate was given in the same manner. Twenty-four hours after the ocular challenge, slit lamp examn. was performed to look for signs of anterior chamber inflammation; then the animals were sacrificed, the eyes were enucleated and histopathol. examn. was performed. Chi-square test was used in statistical analyses for results of scores in slit-lamp examns. In SC-41930-treated eyes, there was a mild acute inflammatory infiltration in anterior chambers while in control groups that received only sodium bicarbonate, a moderate to marked acute inflammatory infiltration was obsd. in anterior chambers. It seems that the drug is likely to have a potential use in ophthalmol. as an antiinflammatory agent.

L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:45965 CAPLUS

DOCUMENT NUMBER: 120:45965

TITLE: Methods of treating aphthous ulcers and other

mucocutaneous disorders

INVENTOR(S): Vora, Kakubhai R.; Khandwala, Atul; Smith, Charles G.

PATENT ASSIGNEE(S): Chemex/Block Drug, JV, USA

SOURCE: Can. Pat. Appl., 26 pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2065496	AA	19921010	CA 1992-2065496	19920409
JP 05097706	A2	19930420	JP 1992-87185	19920408
EP 518798	A2	19921216	EP 1992-470014	19920409
EP 518798	A3	19941207		
R: AT, BE	, CH, DE,	, DK, ES,	FR, GB, GR, IT, LI, LU,	MC, NL, PT, SE
EP 836852	A1	19980422	EP 1997-202524	19920409
EP 836852	B1	20011017		
R: AT, BE	, CH, DE,	, DK, ES,	FR, GB, GR, IT, LI, LU,	NL, SE, MC, PT
AT 206922	E	20011115	AT 1997-202524	19920409
ES 2166043	Т3	20020401	ES 1997-202524	19920409
PRIORITY APPLN. INF	0.:		US 1991-682347 A	19910409
			EP 1992-470014 A3	19920409
OTHER COMPARIAN.	M7 T	777 T 770 4	FOCE	

OTHER SOURCE(S): MARPAT 120:45965

IT 149930-67-6

RL: BIOL (Biological study)

(compn. contg., for treating aphthous ulcers and mucocutaneous
disorders)

RN 149930-67-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-hydroxyphenoxy)-2-hydroxypropoxy]-3,4-dihydro-4-oxo-8-propyl-, monosodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OH} & \text{n-Pr} \\ \text{O-CH}_2-\text{CH-CH}_2-\text{O} & \text{CO}_2\text{H} \\ \\ \text{OH} & \text{O} \end{array}$$

Na

AB For treatment of aphthous ulcers and mucocutaneous disorders, a compn. contg. .gtoreq.1 drug selected from mediator release inhibitors; 5-lipoxygenase inhibitors; leukotriene antagonists; and platelet-activating factor antagonists is claimed. Patients with aphthous ulcers treated twice a day for three days with 5% treating agent showed clin. significant improvement in all parameters (e.g. ulcer size and redn. in erythema) measured over the vehicle paste.

L4 ANSWER 28 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1994:274 CAPLUS

DOCUMENT NUMBER:

120:274

TITLE:

Anti-colitic efficacy of SC-41930 in colitic

cotton-top tamarins

AUTHOR(S):

Clapp, N.; Henke, M.; Hansard, R.; Carson, R.;

Fretland, D.

CORPORATE SOURCE:

Marmoset Res. Cent., Oak Ridge Assoc. Univ., Oak

Ridge, TN, USA

SOURCE:

Agents and Actions (1993), 39(Spec. Conf. Issue),

C36-C38

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE:

Journal

LANGUAGE:

English

IT **120072-59-5**, SC-41930

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(anticolitic activity of, as leukotriene B4 antagonist in cotton-top tamarin)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

To evaluate anti-colitic efficacy, eight cotton-top tamarins (CTTs) with histol. confirmed persistent active colitis were given the anti-inflammatory agent SC-41930 (10 mg/kg BW by gavage BID) for eight weeks. Colonic endoscopy and biopsy observations, CBCs and clin. chemistries, and stool consistency were evaluated pre-, mid-, and posttreatment. Colitic activity was graded histol. from A1 (mild) to A5 (severe); results varied among the seven animals that completed the study; five improved, one worsened, and one was unchanged. Serum enzyme levels were significantly reduced with treatment. Stool condition remained puddly throughout treatment and body wts. did not vary from pretreatment levels. However, SC-41930 produced histol. evidence (reduced nos. of polymorphonuclear cells) of anti-colitic efficacy over an eight-week treatment period in CTTs with persistent active colitis. results support the use of the CTT colitis model to evaluate efficacy of therapeutic agents and provide useful predictive information to aid in the medical management of human IBD.

L4 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:271 CAPLUS

DOCUMENT NUMBER:

120:271

TITLE:

Inflammatory mediator changes in cotton-top tamarins

(CTT) after SC-41930 anti-colitic therapy

AUTHOR (S):

Clapp, N.; Henke, M.; Hansard, R.; Carson, R.; Walsh,

R.; Widomski, D.; Anglin, C.; Fretland, D.

CORPORATE SOURCE:

Marmoset Res. Cent., Oak Ridge Assoc. Univ., Oak

Ridge, TN, USA

SOURCE:

Agents and Actions (1993), 39 (Spec. Conf. Issue),

C8-C10

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE:

Journal English

LANGUAGE:

IT 120072-59-5, SC-41930

RL: BIOL (Biological study)

(colitis treatment by, modulation of inflammatory mediators in)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-

propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Use of the CTT model provides insight into the inflammatory mediator AB contribution in the pathogenesis of idiopathic colitis. To evaluate anti-colitic efficacy, the leukotriene B4 receptor antagonist and anti-inflammatory agent, SC-41930, was administered (10 mg/kg BW by gavage BID) for 8 wk to CTTs with histol. confirmed persistent and defined active colitis. The inflammatory mediators LTB4, PGE2, TXB2, and PAF were assayed in colonic dialyzate that was collected after 1 1/2 h from four CTTs pre-, mid-, and post-treatment, frozen at -70.degree.C, and analyzed by RIA after HPLC purifn. LTB4 levels were lower at mid- and post-treatment and had little inter-animal variation post-treatment. PGE2 and PAF levels were elevated during SC-41930 treatment, but there was a trend towards lower thromboxane B2 levels. Reduced LTB4 (PMN degranulation and chemotaxis) and increased PGE2 (mucosal-protective effect), may, in part, explain the obsd. efficacy of SC-41930 in active tamarin colitis.

L4 ANSWER 30 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:625820 CAPLUS

DOCUMENT NUMBER: 119:225820

TITLE: Preparation of benzopyranonecarboxylic acid

derivatives as antiinflammatants

INVENTOR(S): Cohen, Noal; Lee, Ferdinand Kwo Chen; Yagaloff, Keith

Alan

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE: Eur. Pat. Appl., 128 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 531823	<b>A1</b>	19930317	EP 1992-114691	19920828
R: AT, BE, C	H, DE	, DK, ES, FR	, GB, GR, IE, IT, LI	, LU, MC, NL, PT, SE
US 5273999	Α	19931228	US 1992-898852	19920615
RU 2067973	C1	19961020	RU 1992-5052388	19920828
CA 2077213	AA	19930311	CA 1992-2077213	19920831
HU 66238	A2	19941028	HU 1992-2817	19920902
ZA 9206691	Α	19930310	ZA 1992-6691	19920903
AU 9222191	A1	19930311	AU 1992-22191	19920907
AU 655057	B2	19941201		
NO 9203508	Α	19930311	NO 1992-3508	19920909
CN 1071423	Α	19930428	CN 1992-111386	19920909
JP 05201915	A2	19930810	JP 1992-266694	19920909
BR 9203508	Α	19930413	BR 1992-3508	19920910
US 5434186	Α	19950718	US 1993-128612	19930928
PRIORITY APPLN. INFO.:			US 1991-757100	19910910
			US 1992-898852	19920615

OTHER SOURCE(S):

MARPAT 119:225820

IT 150597-26-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

Ι

(prepn. of, as LTB4 antagonist)

RN 150597-26-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-[(3,4-dihydro-4-oxo-8-propyl-2H-1-benzopyran-7-yl)oxy]pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

GI

Title compds. [I; X = O, CH2; Y = O, CH2CH2, CH:CH, C.tplbond.C, OCH2C6H4; Z = CH2CH2, CH:CH, C.tplbond.C; R1 = H, alkyl, alkenyl, cycloalkyl, aralkyl; A = B, OB; B = substituted mono-, bi-, or tricyclic (hetero)aryl; h, m = 0, 1; n = 1-12], were prepd. as LTB4 antagonists. Thus, 2,3-dihydro-7-hydroxy-8-propyl-4H-1-benzopyran-4-one (prepn. given) was alkylated with Me 2-[(6-methoxy-6-oxohexyl)oxy]-6-[6-(methylsulfonyl)oxyhexyl]benzenepropanoate (prepn. given) followed by sapon. to give 2-[(5-carboxypentyl)oxy]-6-[6-[(3,4-dihydro-4-oxo-8-propyl-2H-1-benzopyran-7-yl)oxy]hexyl]benzenepropanoic acid (II). II inhibited LTB4-induced bronchoconstriction with ID50 = 0.07 mg/kg i.v. Dosage forms were prepd. contq. II.

L4 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:595290 CAPLUS

DOCUMENT NUMBER: 119:195290

TITLE: Leukotriene B4-induced granulocyte trafficking in

guinea pig dermis: effect of second-generation leukotriene B4 receptor antagonists, SC-50605 and

SC-51146

AUTHOR(S): Fretland, D. J.; Widomski, D. L.; Anglin, C. P.;

Penning, T. D.; Yu, S.; Djuric, S. W.

CORPORATE SOURCE: Dep. Immunoinflammat. Dis. Res., Skokie, IL, 60077,

USA

SOURCE: Inflammation (New York, NY, United States) (1993),

17(3), 353-60

CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5, SC-41930 138828-39-4, SC 50605

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiinflammatory activity of, as leukotriene B4 receptor antagonist, neutrophil chemotaxis inhibition by)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-39-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Leukotriene B4 (LTB4) is a proinflammatory product of arachidonic acid AB metab. that has been implicated as a mediator in a no. of inflammatory diseases. When injected intradermally into the guinea pig, LTB4 elicits a dose-dependent migration (chemotaxis) of neutrophils (PMNs) into the injection sites as assessed by the presence of a neutrophil marker enzyme myeloperoxidase. SC-41930 {7-[3-(4-acetyl-3-methoxy-2propylphenoxy) propoxyl -3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid}, a first-generation LTB4 receptor antagonist inhibited the chemotactic actions of LTB4 when coadministered into the dermal site and when given orally with ED50 values of 340 ng and 1.7 mg/kg, resp. The second-generation LTB4 receptor antagonists SC-50605 {7-[3-2(cyclopropylmethyl)-3-methoxy-4-(4-thiazolyl)phenoxy]propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid and SC-51146 {7-[3-[2(cyclopropylmethyl)-3-methoxy-4-[(methylamino)carbonyl]phenoxy]pro poxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-propanoic acid} inhibited LTB4-induced chemotaxis when coadministered with ED50 values of 70 ng and 32 ng, resp., and when given intragastrically with ED50 values of 0.10 and 0.09~mg/kg, resp. SC-41930, SC-50605, and SC-51146 had oral durations of action of 5.5, 15, and 21 h, resp. These potent, LTB4 receptor antagonists may well have application in the medical management of disease states such as asthma, rheumatoid arthritis, inflammatory bowel disease, contact dermatitis, and psoriasis, where LTB4 is implicated as an inflammatory mediator.

L4 ANSWER 32 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:73307 CAPLUS

DOCUMENT NUMBER: 118:73307

TITLE: Optical isomers of a leukotriene B4 antagonist have

differential effects on granulocyte diapedesis in the

guinea pig dermis

AUTHOR(S): Fretland, Donald J.; Widomski, Deborah L.; Anglin,

Charles P.; Yu, Stella; Djuric, Stevan W.

CORPORATE SOURCE: Dep. Immunoinflammatory Dis. Res., Searle Res. and

Dev., Skokie, IL, 60077, USA

SOURCE: Chirality (1992), 4(6), 353-5

CODEN: CHRLEP; ISSN: 0899-0042

DOCUMENT TYPE: Journal LANGUAGE: English

IT 120072-59-5, SC-41930 145707-13-7, (+)SC-41930

**145707-14-8**, (-)SC-41930 RL: BIOL (Biological study)

(granulocyte diapedesis inhibition by, in dermis)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 145707-13-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

145707-14-8 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN propylphenoxy)propoxy]-3,4-dihydro-8-propyl-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

Leukotriene B4 (LTB4) is a proinflammatory product of arachidonic acid AB metab. that has been implicated in a no. of inflammatory diseases When injected intradermally into the guinea pig, LTB4 has been shown to elicit a dose-dependent infiltration of granulocytes as assessed by the level of the neutrophil marker enzyme myeloperoxidase. SC-41930 [7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid] is a potent LTB4 receptor antagonist. When compds. were coadministered along with LTB4 (35 ng) into the dermal site, racemic SC-41930, (+)-SC-41930, and (-)-SC-41930 each inhibited granulocyte accumulation with ED50 values of 340 .+-. 30, 98 .+-. 5.7, and 1000 .+-. 142 ng, resp.; when given i.v. inhibited with ED50 values of 0.5 .+-. 0.06, 0.3 .+-. 0.04, and 1.4 .+-. 0.19 mg/kg, resp.; and when given intragastrically inhibited with ED50 values of 1.7 .+-. 0.20, 1.4 .+-. 0.23, and 3.0 .+-. 0.41 mg/kg, resp.

ANSWER 33 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1992:414418 CAPLUS

DOCUMENT NUMBER:

117:14418

TITLE:

Antiallergic compositions containing

platelet-activating factor antagonists and leukotriene

D4 antagonists

INVENTOR(S):

O'Donnell, Margaret; Welton, Ann Hoffmann-La Roche, F., A.-G., Switz.

SOURCE:

Eur. Pat. Appl., 16 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

P	A.	TENT NO.		KIND	DATE	APPLICATION NO.	DATE
-							
E	Р	469477		A1	19920205	EP 1991-112577	19910726
E	P	469477		B1	19950920		
		R: AT,	BE,	CH, DE	, DK, FR,	GB, IT, LI, LU, NL, SE	
Α	Т	128030			19951015	· · · · · · · · · · · · · · · · · · ·	

. CA	2048236	AA	19920203	CA	1991-2048236	19910731
ZA	9106036	Α	19920527	ZA	1991-6036	19910731
AU	9181535	A1	19920213	AU	1991-81535	19910801
AU	651358	B2	19940721			
JP	04244028	A2	19920901	JP	1991-216009	19910801
US	5227378	A	19930713	US	1992-848564	19920309
PRIORITY	APPLN. INFO.:			US 199	0-561743	19900802
IT 965	666-25-5D, mixts	s. wit	h platelet-a	ctivat	ing factor a	ntagonists

IT 96566-25-5D, mixts. with platelet-activating factor antagonists
140667-06-7

RL: BIOL (Biological study)

(antiallergic compns. contg.)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 140667-06-7 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, mixt. with 5-[3-[5-(2-chlorophenyl)-5,6-dihydro-9-methyl-4H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]-2-propynyl]-6(5H)-phenanthridinone (9CI) (CA INDEX NAME)

CM 1

CRN 140634-85-1 CMF C31 H22 Cl N5 O S

$$\begin{array}{c|c} & \text{Me} & \text{N} \\ & \text{N} & \text{N} \\ & \text{N} & \text{N} \\ & \text{O} & \text{C1} \end{array}$$

CM 2

CRN 96566-25-5 CMF C28 H34 O8

A synergistic combination of platelet activating factor (PAF) antagonists AB with leukotriene D4 (LTD4) antagonists provides protection against allergic reactions, such as antigen-induced death. Guinea pigs were sensitized with an i.p. injection of ovalbumin in a saline soln. and administered with a combination of 5-[3-[4-(2-chlorophenyl)-9-methyl-6Hthieno[3,2-f]1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]-2propynyl]phenanthridin-6(5H)-one (I) (PAF antagonist) and (E) -4-[3-[2-(4-cyclobutyl-2-thiazolyl)ethenyl]phenylamino]-2,2-diethyl-4oxobutanoic acid (II) (LTD4 antagonist) at 1 mg/kg each before challenge with antigen; a survival rate from anaphylactic death at 120 min was 100 %, compared to 0 % for groups administered with I or II alone. Formulations contg. I and II combinations are given.

ANSWER 34 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1992:214350 CAPLUS

DOCUMENT NUMBER:

116:214350

TITLE:

Preparation of 3,4-dihydro-7-

[(carbamoylphenoxy)alkoxy]benzopyran-2-alkanoates and

analogs as LTB4 antagonists

INVENTOR(S):

Djuric, Stevan Wakefield; Docter, Stephen Hermann; Yu,

Stella Siu Tzyy

PATENT ASSIGNEE(S):

Searle, G. D., and Co., USA

SOURCE:

PCT Int. Appl., 149 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

RN

English

FAMILY ACC. NUM. COUNT:

120072-59-5 CAPLUS

PATENT INFORMATION:

P	ATENT	NO.							A	PPLI	CATIO	ои ис	٥.	DATE			
	0 9200	011		A:	2	1992			W	0 19	 91-U	5438	6	1991	0627		
W	0 9200	011		A.	3	1992	0206										
		AT,	AU,	BB,	BG,	BR,	CA,	-	-	DE,	DK,	ES,	FI,	GB,	HU,	JP,	KP,
		KR,	LK,	LU,	MC,	MG,	ΝL,	NO,	$\mathtt{PL}$								
	RW:	ΑT,	BE,	BF,	ВJ,	CG,	CH,	CI,	CM,	DE,	DK,	ES,	FR,	GA,	GB,	GN,	GR,
		IT,	LU,	NL,	SE,	SN,	TD,	TG									
U	S 5124	350		Α		1992	0623		U	S 19	90-54	1543	0	1990	0628		
	U 9185																
	P 0550																
J	P 2942	630		B	2	1999	0830										
	P 5934								E	P 19	91-9	1627	1	1991	0627		
	P 5934																
	R:							FR.	GB.	GR.	TT.	LT.	LU.	NL.	SE		
	т 1311																
	S 2080																
PRIORI																	
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	20072-								′								
R	L: SPN	_		cic l	orer	arat	ion)	; PR	EP (	rrep	arat:	lon)					
	(pre	pn.	of)														

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

IT 141059-14-5P 141059-19-0P 141059-22-5P

141059-25-8P 141059-28-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as LTB4 antagonist)

RN 141059-14-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[2-(cyclopropylmethyl)-3-methoxy-4-[(methylamino)carbonyl]phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 141059-19-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[(methylamino)carbonyl]-2-(2-propenyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeNH-C 
$$CH_2-CH=CH_2$$
  $n-Pr$   $O-(CH_2)_3-O$   $CO_2H$ 

RN 141059-22-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-(2-propenyl)-4-(1-pyrrolidinylcarbonyl)phenoxy]propoxy]-8-propyl- (9CI) (CAINDEX NAME)

OME
$$CH_2-CH=CH_2 \quad n-Pr$$

$$O-(CH_2)_3-O$$

$$CO_2H$$

RN 141059-25-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(aminocarbonyl)-3-methoxy-2-(2-propenyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

OMe
$$H_2N-C$$

$$CH_2-CH=CH_2$$

$$O-(CH_2)_3-O$$

$$CO_2H$$

RN 141059-28-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[(methylamino)carbonyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

I

$$n-Pr$$
 $O-(CH_2)_3-O$ 
 $O-Pr$ 
 $O-Pr$ 

GΙ

$$R^{7}$$
 (CH<sub>2</sub>) nO OCHR<sup>9</sup> (CH<sub>2</sub>) pCO<sub>2</sub>R<sup>2</sup>

AB Title compds. {I; R2 = H, alkyl; R6 = alkyl; R7 = carbamoylphenoxy group Q; R = alkyl, alkenyl, alkynyl, (CH2)mR3; R1 = alkyl; R3 = cycloalkyl; R4,R5 = H, alkyl; NR4R5 = heterocyclyl; R8, R9 = H; R8R9 = CH2CH2; m = 1,2; n = 3-7; p = 0-6] were prepd. Thus, benzopyranpropanoate II (R2 = Me, R7 = iodo) (prepn. given) was condensed with QH (R = allyl, R1 = R5 = H, R4 = Me) (prepn. given) to give II (R7 = Q, R = alkyl, R4 = Me, R5 = H) (III; R2 = Me, R1 = H) which was converted in 2 steps to III (R2 = H, R1 = Me). The latter was 8.9 times as effective as 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid in inhibition of binding of LTB4 at human neutrophils in vitro.

ANSWER 35 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:145642 CAPLUS

DOCUMENT NUMBER: 116:145642

Induction of colitis in rats by 2,2'-azobis[2-TITLE:

amidinopropane] dihydrochloride

Tamai, Hiroshi; Levin, Stuart; Gaginella, Timothy S. AUTHOR(S):

Searle Res. and Dev., Skokie, IL, 60077, USA CORPORATE SOURCE:

Inflammation (New York, NY, United States) (1992), SOURCE:

16(1), 69-81

CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE: Journal LANGUAGE: English

120072-59-5, SC-41930

RL: BIOL (Biological study)

(azobis (amidinopropane) -induced colitis prevention by)

120072-59-5 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CNpropylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

2,2'-Azobis[2-amidinopropane] dihydrochloride (AAPH), an azo compd. that generates free radicals in vitro, was administered intrarectally to rats. Acute mucosal injury was assessed histol. by light microscopy and biochem. by myeloperoxidase (MPO) activity. Intrarectal administration of AAPH (60, 90, and 150 mg/kg) caused erythema, edema, and histol. verifiable mucosal inflammation. MPO activity was increased 9-18-fold above the control level. The levels of thiobarbituric acid reactants and sulfhydryls were significantly increased and decreased, resp., by 90 mg/kg AAPH. Sulfasalazine, 5-aminosalicylic acid, the LTB4 receptor antagonist SC 41930, and the antioxidant glutathione prevented the inflammation. This model of mucosal inflammation may be useful in evaluating new therapeutic agents for the treatment of inflammatory bowel disease

ANSWER 36 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:83676 CAPLUS

DOCUMENT NUMBER: 116:83676

TITLE: Preparation of heterocycles containing

alkoxy-substituted dihydrobenzopyran-2-carboxylic

acids as leukotriene B4 (LTB4) antagonists

INVENTOR(S): Djuric, Stevan Wakefield; Penning, Thomas Dale;

Snyder, James Patrick

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE -----WO 9117160 A1 19911114 WO 1991-US2981 19910501

W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR,

LK, LU, MC, MG, MW, NL, NO, PL, RO, SD, SE, SU, US

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG US 1990-521777 19900510 US 5073562 19911217 Α CA 1991-2082500 19910501 CA 2082500 AA 19911111 AU 1991-79020 19910501 AU 9179020 A1 19911127 AU 647487 B2 19940324 19910501 EP 527922 **A1** 19930224 EP 1991-910026 EP 527922 **B1** 19950308 BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE R: AΤ, JP 05507084 T2 19931014 JP 1991-509388 19910501 ES 2069295 Т3 19950501 ES 1991-910026 19910501 IL 98090 A1 19950731 IL 1991-98090 19910509 ZA 9103546 Α 19920729 ZA 1991-3546 19910510 Α 19930309 US 1991-759272 19910913 US 5192782 US 5212198 Α 19930518 US 1992-958632 19921009 PRIORITY APPLN. INFO.: US 1990-521777 19900510 WO 1991-US2981 19910501 US 1991-759272 19910913 OTHER SOURCE(S): MARPAT 116:83676 138828-24-7P 138828-27-0P 138828-28-1P 138828-29-2P 138828-31-6P 138828-33-8P

138828-36-1P 138828-39-4P 138828-42-9P 138828-44-1P 138828-46-3P 138828-47-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as LTB4 antagonist)

RN138828-24-7 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(4-CN oxazolyl) -2-propylphenoxy]propoxy] -8-propyl- (9CI) (CA INDEX NAME)

RN 138828-27-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-[(phenylmethyl)thio]-1H-imidazol-4-yl]-2-propylphenoxy]propoxy]-8-propyl-(9CI) (CA INDEX NAME)

RN138828-28-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[4-(1H-imidazol-4-yl)-3-methoxy-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c}
H \\
N \\
N \\
MeO
\end{array}$$

$$\begin{array}{c}
O - (CH_2)_3 - O \\
\end{array}$$

$$\begin{array}{c}
O - CO_2H \\
\end{array}$$

RN 138828-29-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(2-amino-4-thiazolyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-31-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-propyl-4-(4-thiazolyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-33-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methyl-4-oxazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

RN 138828-36-1 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-2-(2-propenyl)-4-(4-thiazolyl)phenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{N} & \text{O} & \text{CO}_2H \\
\hline
\text{S} & \text{OMe} & \text{CH}_2 - \text{CH} & \text{CH}_2
\end{array}$$

RN 138828-39-4 CAPLUS

RN 138828-42-9 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-CN methoxy-4-thiazolyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

MeO 
$$N$$
  $O-(CH_2)_3-O$   $O-Pr$   $O-CO_2H$   $N-Pr$ 

138828-44-1 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-(2,3-dihydro-2-thioxo-4-CNthiazolyl)-3-methoxy-2-propylphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

S

MeO

$$n-Pr$$
 $n-Pr$ 
 $n-Pr$ 
 $n-Pr$ 
 $n-Pr$ 

RN 138828-46-3 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-CN(methylthio) -4-thiazolyl] -2-propylphenoxy] propoxy] -8-propyl- (9CI) (CA INDEX NAME)

MeS 
$$N$$
  $O-(CH2)3-O$   $O-Pr$   $O-CO2H$ 

RN 138828-47-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-[2-[(phenylmethyl)thio]-4-thiazolyl]-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

GI

$$R^{10}$$
 $CH_2 (CH_2)_n CH_2 O$ 
 $CH_2)_p CO_2 R^2$ 

Title compds. I (R = C2-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, R3(CH2)m, AB wherein R3 = C3-5 cycloalkyl, m = 1,2; R1 = C1-4 alkyl; R2 = H, C1-5  $alkyl; R4 = C1-6 \ alkyl; n = 1-5; p = 0-6; Y = NH, O, S; Z = H, C1-4 \ alkyl,$ C1-4 alkoxy, R5R4N wherein R4, R5 = H, C1-4 alkyl, R6S wherein R6 = H, PhCH2, C1-4 alkyl), stereoisomers and salts thereof, are prepd. I as LTB4 antagonists are useful as antiinflammatory agents and in treatment of LTB4-mediated conditions. The 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylate (prepn. given) was converted to the 2-hydroxy-1-oxoethyl deriv. which was treated with (F3CSO2)20 to give the 2-(trifluoromethylsulfonyloxy deriv. This compd. was stirred with HCONH2 and DMF to give I (R = R4 = Pr, R1 = R4R2 = Me, Y = O, Z = H, n = 1, p = 0) which was stirred with LiOH to give I (R = R4 = Pr, R1 = Me, R2 = Z = H, Y = O, n = 1, p = 0) (II). II and other title compds. showed LTB4 antagonism.

ANSWER 37 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:721 CAPLUS

DOCUMENT NUMBER: 116:721

TITLE:

Pheroxypentyloxy-3,4-dihydro-2H-1-benzopyran

derivatives for treatment of leukotriene-induced

Ι

inflammation of the intestinal mucosa PATENT ASSIGNEE(S): Hoffmann-La Roche, F. A.-G., Switz.

SOURCE:

Austrian, 20 pp.

CODEN: AUXXAK

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
	AT 392902	В	19910710	AT 1987-2643	19871008				
	AT 8702643	Α	19901215						
OTHE	R SOURCE(S):	MA	RPAT 116:721						
IT	T 96566-25-5 131147-29-0 131147-29-0D, esters								
	RL: BIOL (Biolog	ical s	tudy)						
	(leukotriene-	induce	d intestinal m	ucosa inflammation	treatment with)				
RN	96566-25-5 CAPL	US							
CN	2H-1-Benzopyran-	2-carb	oxylic acid, 6	-acetyl-7-[[5-(4-a	cetyl-3-hydroxy-2-				
	propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)								

RN 131147-29-0 CAPLUS 131147-29-0 CAPLUS RN

The title compds., esp. racemic 6-acetyl-7-[5-(4-acetyl-3-hydroxy-2-AΒ propylphenyloxy)pentyloxy]-3,4-dihydro-2H-1-benzopyran-2-carbonic acid (I), are prepd. as oral, rectal, or parenteral formulations. I at 10-100 mg/kg orally was effective against clindamycin-induced colitis in hamsters.

ANSWER 38 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1991:597978 CAPLUS

DOCUMENT NUMBER:

115:197978

TITLE:

The antiinflammatory agent SC-41930 inhibits

granulocyte infiltration of the rodent dermis induced

by 6-trans-leukotriene B4

AUTHOR(S):

Fretland, D. J.; Widomski, D. L.; Anglin, C. P.;

Gaginella, T. S.

CORPORATE SOURCE:

Searle Res. Dev., Skokie, IL, 60077, USA

SOURCE:

Prostaglandins, Leukotrienes and Essential Fatty Acids

(1991), 44(1), 61-5

CODEN: PLEAEU; ISSN: 0952-3278

DOCUMENT TYPE:

Journal English

LANGUAGE:

120072-59-5, SC-41930 TT

RL: BIOL (Biological study)

(granulocyte infiltration stimulation by leukotriene B4 inhibition by,

inflammation inhibition in relation to)

120072-59-5 CAPLUS RN

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB Granulocyte diapedesis in response to the generation of defined chemotaxins such as leukotriene B4 (LTB4), 12(R)-hydroxyeicosatetraenoic acid [12(R)-HETE], C5a, platelet activating factor and others is a hallmark of the inflammatory process that is thought to contribute to the tissue pathol. seen in a no. of **diseases**. 6-trans-LTB4 arises through the myeloperoxidase (MPO)-HETE. The intradermal (i.d.) injection of 6-trans-LTB4 induces a dose and time dependent influx of granulocytes into the guinea-pig (Hartley) dermis. When various doses of the LTB4 receptor antagonist and antiinflammatory agent, SC-41930 {7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid} given 30 min ahead of i.d. injection of 6-trans-LTB4 (10 .mu.g/i.d. site), granulocyte infiltration, as assessed by dermal levels of the neutrophil marker enzyme MPO was inhibited with an

ED50 value of 9.8 mg/kg in the guinea-pig. When various doses (10-25 .mu.g) 6-trans-LTB4 were injected in the mouse (CD-1) dermis, there was a dose-related increase in granulocyte accumulation at 4 h. Furthermore when mice were pretreated (-30 min) with SC-41930 (1 mg/kg) orally, the trafficking of granulocytes was inhibited (p <.01) as assessed by dermal MPO levels. SC-41930 orally inhibits 6-trans-LTB4-induced granulocyte accumulation in the guinea-pig more potently than against the response to  $12\,(R)$ -HETE(ED50:13.4 mg/kg) but less potently than against LTB4 (ED50:0.6 mg/kg). These multiple activities may contribute to this compd.'s potential as an inflammation inhibitor.

L4 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:549984 CAPLUS

DOCUMENT NUMBER:

115:149984

TITLE:

Effect of the leukotriene B4 receptor antagonist,

SC-41930, on experimental allergic encephalomyelitis

(EAE) in the guinea pig

AUTHOR (S):

Fretland, D. J.; Widomski, D. L.; Shone, R. L.; Levin,

S.; Gaginella, T. S.

CORPORATE SOURCE:

Dep. Pathol., Searle Res. and Dev., Skokie, IL, 60077,

USA

SOURCE:

Agents and Actions (1991), 34(1-2), 172-4

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE:

Journal English

LANGUAGE:

Engi

IT 120072-59-5, SC-41930

RL: BIOL (Biological study)

(multiple sclerosis treatment with, allergic encephalomyelitis model in

relation to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-

propylphenoxy) propoxy] -3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

AB The accepted model for the human demyelinating disease, multiple sclerosis (MS), is exptl. allergic encephalomyelitis (EAE). The ability of SC-41930 (I) to modulate the symptoms of acute EAE was examd. in guinea pigs. Animals were pretreated with SC-41930 (20 mg/kg, i.p.) for two days followed by thrice-weekly maintenance. At day 52, a significant no. of the SC-41930-treated animals were alive as compared to EAE alone. Control animals had an increase in body wt. while EAE animals lost over 20%

Ι

(p<0.5) of their body wt. by day 18. SC-41930-treatment significantly reduced, but did not completely inhibit the cachectic response. The results indirectly implicate LTB4 in the pathogenesis of EAE. Agents that modify this model may be useful in the treatment of human MS.

L4 ANSWER 40 OF 48 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1991:178176 CAPLUS

DOCUMENT NUMBER: 114:178176

TITLE: A23187-induced pulmonary gas trapping and inflammation

in the guinea pig

AUTHOR(S): Stengel, Peter W.; Williams, G. D.; Silbaugh, S. A.

CORPORATE SOURCE: Lilly Res. Lab., Indianapolis, IN, 46285, USA SOURCE: Agents and Actions (1991), 32(3-4), 270-6

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE: Journal LANGUAGE: English

IT **120072-59-5**, SC 41930

RL: BIOL (Biological study)

(lung obstruction and inflammation from A 23187 response to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB A brief A23187 aerosol exposure produced prolonged airway obstruction with granulocyte accumulation in conscious guinea pigs. Aminophylline, atropine, pyrilamine, salbutamol, SC-41930 (a leukotriene B4 antagonist) and WEB 2086 (a platelet-activating factor antagonist) were administered i.v. to evaluate their ability to prevent these changes. Inhaled salbutamol was also assessed. Aminophylline, atropine, and salbutamol (i.v. and aerosol) inhibited the A23187-induced pulmonary gas trapping. Pyrilamine, SC-41930 and WEB 2086 did not influence this airway-obstructive effect. Only atropine, inhaled salbutamol and SC-41930 inhibited the cell influx, while pyrilamine potentiated the inflammation. Apparently, A23187 produces a sustained bronchospasm and an intense granulocyte accumulation. The treatment agents tested differ considerably in their ability to alter A23187-induced obstruction and inflammation.

L4 ANSWER 41 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:157171 CAPLUS

DOCUMENT NUMBER: 114:157171

TITLE: SC-41930, a leukotriene B4 receptor antagonist,

inhibits 12(S)-hydroxyeicosatetraenoic acid

(12(S)-HETE) binding to epidermal cells

AUTHOR(S): Kemeny, I.; Ruzicka, T.

CORPORATE SOURCE: Dep. Dermatol., Univ. Munich, Munich, 8000/2, Germany

SOURCE: Agents and Actions (1991), 32(3-4), 339-42

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE: Journal

LANGUAGE: English

IT **120072-59-5**, SC-41930

RN

RL: BIOL (Biological study)

(hydroxyeicosatetraenoic acid receptors antagonism by, in epidermal

cells of humans) 120072-59-5 CAPLUS

SC-41930, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-propoxyl]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylic acid, a potent leukotriene-B4 (LTB4) receptor antagonist, inhibits in vivo 12-hydroxyeicosatetraenoic acid (12-HETE)-induced neutrophil infiltration, suggesting a potential 12-HETE receptor antagonist effect, as well. Since 12-HETE is assumed to have a pathophysiol. role in inflammatory skin diseases, and epidermal cells possess high affinity binding sites for 12(S)-HETE, the effect of SC-41930 on 12(S)-HETE binding to the human epidermal cell line, SCL-II was studied. SC-41930 antagonized the 12(S)-HETE binding to SCL-II cells with a Ki of 480 nM. This Ki value is similar to that obtained for the inhibition of LTB4 binding to human neutrophils. Those results show that SC-41930, in addn. to its LTB4 receptor antagonist effect, exhibits 12-HETE receptor antagonist effect as well, and therefore may be of benefit in skin diseases with elevated 12-HETE levels.

L4 ANSWER 42 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:35615 CAPLUS

DOCUMENT NUMBER: 114:35615

TITLE: Effect of the leukotriene B4 receptor antagonist

SC-41930 on colonic inflammation in rat, guinea pig

and rabbit

Journal

AUTHOR(S): Fretland, Donald J.; Widomski, Deborah; Tsai, Bie

Shung; Zemaitis, Jeanne M.; Levin, Stuart; Djuric, Stevan W.; Shone, Robert L.; Gaginella, Timothy S.

CORPORATE SOURCE: Dep. Gastrointest. Dis. Res., Searle Res. and Dev.,

Skokie, IL, 60077, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics

(1990), 255(2), 572-6

CODEN: JPETAB; ISSN: 0022-3565

DOCUMENT TYPE:

LANGUAGE: English

IT 120072-59-5, SC 41930

RL: BIOL (Biological study)

(colon inflammation prevention by, as leukotriene B4 antagonist, in

inflammatory bowel disease model)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-

propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

AB Inflammatory bowel disease is a chronic inflammatory disorder of the gastrointestinal tract that includes ulcerative

colitis and Crohn's disease. Leukotriene B4 is thought to be a prominent proinflammatory mediator in these diseases, in that leukotriene B4 levels are increased in the colonic mucosa of inflammatory bowel disease patients and there is increased polymorphonuclear leukocyte infiltration of these tissues. The efficacy of 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)-3,4-dihydro-8-propyl-2H-1benzopyran-2-carboxylic acid (SC-41930), a potent, orally active leukotriene B4 receptor antagonist, in a model of inflammatory bowel disease was examd. Colonic mucosal inflammation was induced in rats, guinea pig and rabbits by rectal instillation of a dil. soln. of acetic acid. Twenty-four hours later, mucosal levels of myeloperoxidase (a marker enzyme for neutrophil infiltration) and extravasation of i.v. administered Evans blue dye (a marker of vascular disruption and increased permeability) were measured. Tissues were also evaluated histol. The animals received either SC-41930 or vehicle, intrarectally, 30 min after or 1 h before and 1 h after the acetic acid. When given 30 min after acetic acid instillation SC-41930 prevented the rise in myeloperoxidase and dye extravasation obsd. in the acetic acid inflamed tissue. The SC-41930-treated tissues were less edematous and had fewer neutrophils within the subepithelial space. Median ED (ED50) values for vascular protection were approx. 20 mg/kg for both rat and guinea pig. ED50 values for inhibition of granulocyte accumulation were 20 mg/kg for rat, 24 mg/kg for guinea pig and 30 mg/kg for rabbit. These data indicate that SC-41930 is effective locally to prevent acute colonic inflammation.

L4 ANSWER 43 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1990:216695 CAPLUS

DOCUMENT NUMBER:

112:216695

TITLE:

Preparation and formulation of phenoxyalkoxy-3,4-dihydro-2H-1-benzopyrans for therapy of allergic and

inflammatory disorders

INVENTOR(S):

Laurenzano, Anthony James; Partridge, John Joseph

Hoffmann-La Roche, F., und Co. A.-G., Switz.

PATENT ASSIGNEE(S):

Eur. Pat. Appl., 31 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 336068	A1	19891011	EP 1989-101886	19890203
R: AT, BE,	CH, DE	, FR, GB, IT,	LI, LU, NL, SE	
DK 8900596	Α	19890812	DK 1989-596	19890209
JP 01246275	A2	19891002	JP 1989-28803	19890209
ZA 8901036	Α	19891025	ZA 1989-1036	19890209
AU 8929820	A1	19890817	AU 1989-29820	19890210
PRIORITY APPLN. INFO.	:		US 1988-154765	19880211
OTHER SOURCE(S):	MAI	RPAT 112:2166	595	
TT 06566 25 5 06606	71 4 6	16606 72 6		

IT 96566-25-5 96686-71-4 96686-73-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification of)

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 96686-71-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 96686-73-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$Ac$$
 $Pr-n$ 
 $Ac$ 
 $OH$ 
 $CO_2H$ 

GI

AB Title compds. I (R1, R6 = H, alkyl; R2 = H, halo; R3-R5 = H, acyl, alkyl provided only 1 group is acyl; R7 = higher alkyl, PhCH2; X = C3-7 alkylene) and their enantiomers were prepd. and formulated. Thus, (.+-.)-6-acetyl-7-[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyloxy]-3,4-dihydro-2H-1-benzopyran-2-carboxylic acid (II) was esterified by 1-octanol in PhMe with p-MeC6H4SO3H.H2O catalyst under Dean-Stark conditions to give II n-octyl ester (III) in 75% yield. Tablets contg. III, lactose, starch, polyvinylpyrrolidone, and Mg stearate were prepd. and coated with a soln. of hydroxypropyl methylcellulose phthalate in alc.-CH2Cl2. Seven syntheses and 11 formulations are described.

ACCESSION NUMBER: 1990:111716 CAPLUS

DOCUMENT NUMBER: 112:111716

TITLE: SC-41930 inhibits neutrophil infiltration of the

cavine dermis induced by 12(R)-hydroxyeicosatetraenoic

acid

AUTHOR(S): Fretland, D. J.; Widomski, D. L.; Shone, R. L.;

Penning, T. D.; Miyashiro, J. M.; Djuric, S. W.

CORPORATE SOURCE: Gastrointest. Dis. Res. Dep., G. D. Searle and Co.,

Skokie, IL, 60077, USA

SOURCE: Prostaglandins, Leukotrienes and Essential Fatty Acids

(1989), 38(3), 169-72

CODEN: PLEAEU; ISSN: 0952-3278

DOCUMENT TYPE: Journal LANGUAGE: English

IT **120072-59-5**, SC-41930

RL: BIOL (Biological study)

(neutrophil infiltration inhibition by, psoriasis in relation to)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

Psoriasis is a disease state characterized by epidermal proliferation, neutrophil infiltration, and release of the proinflammatory mediators leukotriene-B4 (LTB4) and 12(R)-hydroxyeicosatetraenoic acid [12(R)-HETE]. LTB4 and 12(R)-HETE are chemoattractant to the neutrophil, the latter approx. 1000-fold less potent. LTB4 and 12(R)-HETE are present in psoriatic scale, the latter in quantities so much greater than LTB4 that it is proposed as a primary mediator of neutrophil infiltration in psoriasis. 12(R)-HETE, synthesized in optically pure form by a new, shorter route, was injected into the cavine dermis. At a dose of 25 .mu.g per intradermal site, 12(R)-HETE was a significant chemoattractant to the neutrophil (as assessed by dermal myeloperoxidase levels). SC-41930 (I), given intragastrically, inhibited 12(R)-HETE-induced neutrophil infiltration of the cavine dermis with an ED50 value of 13.5 mg/kg. Compds. such as SC-41930 may have utility for treating human psoriasis.

Ι

ANSWER 45 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:624967 CAPLUS

DOCUMENT NUMBER: 111:224967

TITLE: Effect of a leukotriene B4 receptor antagonist on

leukotriene B4-induced neutrophil chemotaxis in cavine

Fretland, D. J.; Widomski, D. L.; Zemaitis, J. M.; AUTHOR (S):

Djuric, S. W.; Shone, R. L.

Dep. Gastrointest. Res., G. D. Searle and Co., Skokie, CORPORATE SOURCE:

IL, 60077, USA

Inflammation (New York, NY, United States) (1989), SOURCE:

13(5), 601-5

CODEN: INFLD4; ISSN: 0360-3997

DOCUMENT TYPE: Journal LANGUAGE: English

120072-59-5, SC 41930 TT

RL: BIOL (Biological study)

(LTB4-induced neutrophil chemotaxis in dermis response to, inflammation

inhibition in relation to)

120072-59-5 CAPLUS RN

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CN

propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

Leukotriene B4 (LTB4) is a proinflammatory product of arachidonic acid AB metab. that has been implicated as a mediator in a no. of inflammatory diseases. When injected intradermally into the cavine, LTB4 elicites a dose-dependent immigration (chemotaxis) of neutrophils (PMNs) into the injection sites as assessed by the presence of a neutrophil marker enzyme myeloperoxidase. SC-41930, a potent LTB4 receptor antagonist inhibited the chemotactic actions of LTB4 when coadministered into the dermal site and when given i.v. or orally with ED50 values of 200 ng, 0.5 mg/kg, and 0.6 mg/kg resp. This compd. may well have application in disease states, such as inflammatory bowel disease and psoriasis, where LTB4 is implicated as a proinflammatory mediator.

ANSWER 46 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:433445 CAPLUS

DOCUMENT NUMBER: 111:33445

TITLE: The effect of leukotriene-B4 receptor antagonist,

SC-41930, on acetic acid-induced colonic inflammation

Fretland, D. J.; Levin, S.; Tsai, B. S.; Djuric, S. W.; Widomski, D. L.; Zemaitis, J. M.; Shone, R. L.; AUTHOR (S):

Bauer, R. F.

Dep. Gastrointest. Dis. Res., G. D. Searle and Co., CORPORATE SOURCE:

Skokie, IL, 60077, USA

Agents and Actions (1989), 27(3-4), 395-7 SOURCE:

CODEN: AGACBH; ISSN: 0065-4299

DOCUMENT TYPE: Journal LANGUAGE: English

120072-59-5, SC 41930

RL: BIOL (Biological study)

(intestinal inflammation therapy with, as LTB4 receptor antagonist)

RN120072-59-5 CAPLUS

2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-CNpropylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

GI

AB SC 41930 (I) is a potent in vitro LTB4 receptor antagonist. LTB4 levels are elevated in colonic tissue of inflammatory bowel disease (IBD) patients, which may account for the high degree of neutrophil (PMN) infiltration. The guinea pig acetic acid-induced colonic inflammation model has characteristics of IBD including PMN infiltration, edema, ulceration and necrosis. The model was used to evaluate the effect of SC-41930. SC-41930 was given orally, 30 min before and after intrarectal administration of 3% acetic acid. The PMN marker enzyme, myeloperoxidase, was measured along with histol. evaluation to assess inflammation. Both parameters showed significantly less inflammation in SC-41930 treated animals with an oral ED50 of 20 mg/kg. These study results indicate a role for LTB4 in colonic inflammation and that an LTB4 receptor antagonist may be beneficial for treatment of IBD.

Ι

L4 ANSWER 47 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:199191 CAPLUS

DOCUMENT NUMBER: 110:199191

TITLE: Preparation of 6-acetyl-7-[5-(4-acetyl-3-hydroxy-2-

propylphenoxy) pentyloxy] -3,4-dihydro-2H-1-benzopyran-2-

carboxylates and antiinflammatory pharmaceuticals

containing them

INVENTOR(S): Gaginella, Timothy Samuel; Welton, Ann Frances; Will,

Peter Graig

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent German

LANGUAGE:

r. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE .	APPLICATION NO.	DATE
EP 256532	A1	19880224	EP 1987-111781	19870813
EP 256532	B1	19920520		
R: BE, CH,	DE, FR,	GB, IT, LI,	LU, NL, SE	
ZA 8705319	A	19880427	ZA 1987-5319	19870720
IL 83533	A1	19911121	IL 1987-83533	19870813
AU 8777140	A1	19880218	AU 1987-77140	19870814
AU 607931	B2	19910321		
JP 63048216	A2	19880229	JP 1987-201953	19870814
HU 46845	A2	19881228	HU 1987-3669	19870814

HU 203471	В	19910828		
CA 1303508	A1	19920616	CA 1987-544521	19870814
US 5112856	A	19920512	US 1990-569241	19900816
PRIORITY APPLN.	INFO.:		US 1986-897450	19860815
			US 1989-315014	19890224

OTHER SOURCE(S): MARPAT 110:199191

IT 96565-55-8 96566-25-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceuticals contg., for treatment of enteritis)

RN 96565-55-8 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 96566-25-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 6-acetyl-7-[[5-(4-acetyl-3-hydroxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

GI

AB The title dihydrobenzopyran derivs. (I; R = H, lower alkyl), their enantiomeric forms, or their salts are inflammation inhibitors for enteritis and other forms of inflammation of the intestinal mucosa assocd. with the presence of leukotriene. A mixt. of 20.2 g Me (.+-.)-6-acetyl-7-(5-bromopentyloxy)-3,4-dihydro-2H-1-benzopyran-2-carboxylate and 11.0 g 2,4-dihydroxy-3-propylacetophenone were treated with 25.4 g K2CO3 in 436 mL dry Me2CO and 218 mL DMF for 5.5 h under reflux to give (.+-.)-I (R = Me) in 96.8% yield. Clindamycin-induced colitis in hamsters was characterized by edema, bleeding and stagnating blood flow, necrosis and mucosal erosions in the cecum and to a lesser

extend in the colon. This **condition** was improved when the animals were treated with 100 mg/kg (.+-.)-I (R=H) and the hazard ratio (survival rate of treated vs. nontreated controls) was 64.0. Tablets contained (.+-.)-I (R=H) 100, lactose 30, preglatinized starch 4, microcryst. cellulose 20, modified starch 5, and Mg stearate 1 mg.

L4 ANSWER 48 OF 48 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:173088 CAPLUS

DOCUMENT NUMBER: 110:173088

TITLE: Preparation of alkoxy-substituted dihydrobenzopyran-2-

carboxylates and analogs as antiinflammatory agents

INVENTOR(S): Djuric, Stevan Wakefield; Shone, Robert Larry; Yu,

Stella Siu Tzyy

PATENT ASSIGNEE(S): Searle, G. D., and Co., USA SOURCE: Eur. Pat. Appl., 56 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT NO.		DATE		APPLICATION NO.	
					EP 1988-108449	19880527
	292977					
					R, IT, LI, NL, SE	
US					US 1988-188708	
NO	8802317	Α	19881130		NO 1988-2317	19880526
NO	171063	В	19921012			
NO	171063	С	19930120			
AU	8816681	A1	19881201		AU 1988-16681	19880526
AU	611153	B2	19910606			
IL	86502	A1	19940731		IL 1988-86502	19880526
CA	1337660	A1	19951128		CA 1988-567806	19880526
DK	8802901	Α	19881130		DK 1988-2901	19880527
FI	8802505	A	19881130		FI 1988-2505	19880527
JP	01038045	A2	19890208		JP 1988-130037	19880527
	2758902		19980528			
ZA	8803820		19890726		ZA 1988-3820	19880527
AT	66917	E	19910915		AT 1988-108449	19880527
	2051796				ES 1988-108449	
	Y APPLN. INFO.:				1987-57136	
LICEORCE					1988-188708	
					1988-108449	
				r.P	1900-100449	19000327

OTHER SOURCE(S): CASREACT 110:173088; MARPAT 110:173088

IT 120072-38-0P 120072-40-4P 120072-41-5P 120072-50-6P 120072-54-0P 120072-56-2P

120072-59-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as antiinflammatory agent)

RN 120072-38-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-acetyl-2-(cyclopropylmethyl)-3-methoxyphenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

$$CH_2$$
 $O-(CH_2)_3-O$ 
 $CO_2H$ 
 $AC$ 

RN 120072-40-4 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-[4-acetyl-3-methoxy-2-(2-propenyl)phenoxy]propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 120072-41-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro- (9CI) (CA INDEX NAME)

RN 120072-50-6 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[[5-(4-acetyl-3-methoxy-2-propylphenoxy)pentyl]oxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 120072-54-0 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 3,4-dihydro-7-[3-[3-methoxy-4-(2-methyl-1-oxopropyl)-2-propylphenoxy]propoxy]-8-propyl- (9CI) (CA INDEX NAME)

$$i-Pr-C$$
 $n-Pr$ 
 $O-(CH2)3-O$ 
 $O-CO2H$ 

RN 120072-56-2 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-ethoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

RN 120072-59-5 CAPLUS

CN 2H-1-Benzopyran-2-carboxylic acid, 7-[3-(4-acetyl-3-methoxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl- (9CI) (CA INDEX NAME)

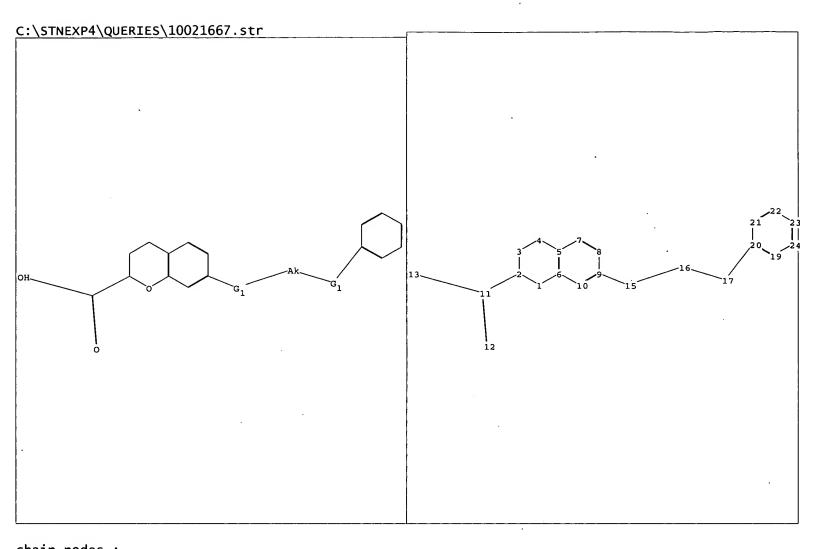
GI

$$R^{3}C$$
 $R^{1}$ 
 $O-W-O$ 
 $R^{5}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 

Title compds. I [ R1 = C2-6 alkyl, alkenyl, or alkynyl, (CH2)nR; n = 1,2; R = C3-5 cycloalkyl; R2 = Me, Et; R3 = C1-5 alkyl; W = (CH2)x; C3-7 alkenylene or alkynylene, cyclopentanediyl; x = 2-7; R4 = H, C2-5 alkyl, alkenyl, or alkynyl; Q = O, CH2; B = CH2, CO, CHOH; R5 = H, C1-6 alkyl, C2-4 alkanoyl, CO2H, alkoxycarbonyl; (CH2)yCO2R8; R5R6 = bond; A = ZCO2R7, ZCONR9R10; Z = bond, C.ltoreq.6 alkylene or alkenylene; R7, R8 = H, C1-6 alkyl; y = 0-4; R9, R10 = H, C1-6 alkyl, C1-6 cycloalkyl; NR9R10 = heterocyclyl] were prepd. as antiinflammatory agents. Me 7-[3-(4-acetyl-3-hydroxy-2-propylphenoxy)propoxy]-3,4-dihydro-8-propyl-2H-1-benzopyran-2-carboxylate underwent etherification by MeI and K2CO3 in Me2CO, followed by sapon. with LiOH in aq. MeOH, to give (phenoxypropoxy)dihydrobenzopyrancarboxylic acid II. Compared to its prior art hydroxy analog II was 5-fold more potent as an LTB4 antagonist and over 10-fold less potent as an LTD4 antagonist.

=> log y COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	356.50	496.99
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL
CA SUBSCRIBER PRICE	-49.56	-49.56

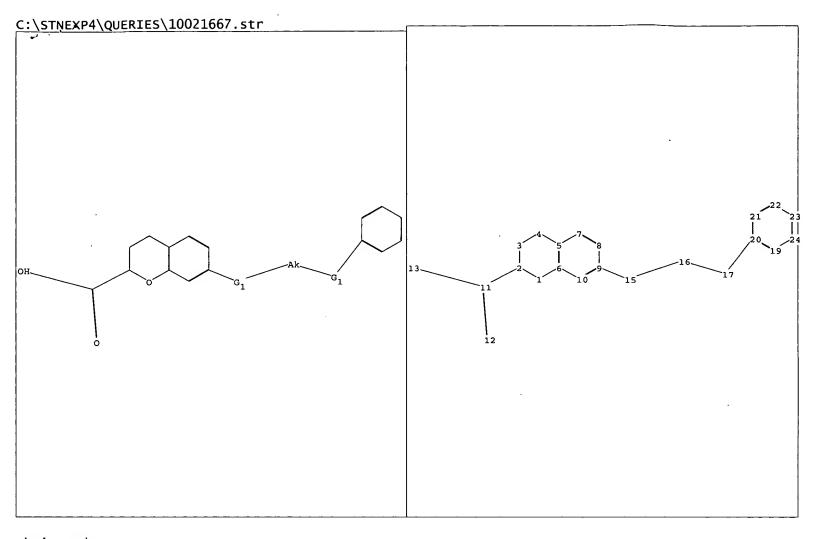
STN INTERNATIONAL LOGOFF AT 18:22:09 ON 19 NOV 2002



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chain nodes :
    11   12   13   15   16   17
ring nodes :
    1   2   3   4   5   6   7   8   9   10   19   20   21   22   23   24
chain bonds :
    2-11   9-15   11-12   11-13   15-16   16-17   17-20
ring bonds :
    1-2   1-6   2-3   3-4   4-5   5-6   5-7   6-10   7-8   8-9   9-10   19-20   19-24   20-21   21-22   22-23   23-24
exact/norm bonds :
    1-2   1-6   2-3   3-4   4-5   9-15   15-16   16-17   17-20
exact bonds :
    2-11
normalized bonds :
   5-6   5-7   6-10   7-8   8-9   9-10   11-12   11-13   19-20   19-24   20-21   21-22   22-23   23-24
```

G1:C,O,S,N

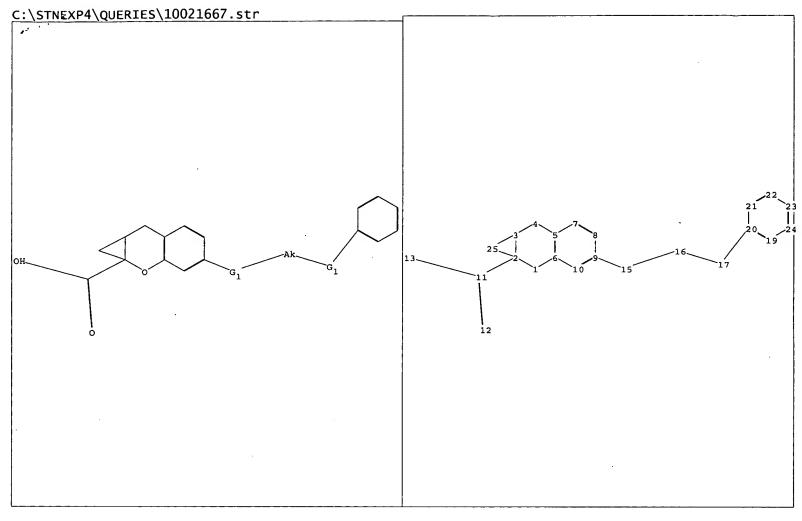
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom



```
chain nodes :
   11 12 13 15 16 17
ring nodes:
              5 6 7 8 9 10 19 20 21 22 23 24
chain bonds :
   2-11 9-15 11-12 11-13 15-16 16-17 17-20
ring bonds :
   1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 19-20 19-24 20-21 21-22 22-23
   23-24
exact/norm bonds :
   1-2 1-6 2-3 3-4 4-5 9-15 15-16 16-17 17-20
exact bonds :
   2-11
normalized bonds :
   5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-13 19-20 19-24 20-21 21-22 22-23 23-24
G1:C,O,S,N
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom

Match level:



```
Chain nodes :
    11 12 13 15 16 17

ring nodes :
    1 2 3 4 5 6 7 8 9 10 19 20 21 22 23 24 25

chain bonds :
    2-11 9-15 11-12 11-13 15-16 16-17 17-20

ring bonds :
    1-2 1-6 2-3 2-25 3-4 3-25 4-5 5-6 5-7 6-10 7-8 8-9 9-10 19-20 19-24 20-21 21-22 22-23 23-24

exact/norm bonds :
    1-2 1-6 2-3 2-25 3-4 3-25 4-5 9-15 15-16 16-17 17-20

exact bonds :
    2-11

normalized bonds :
    5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-13 19-20 19-24 20-21 21-22 22-23 23-24
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom

Match level: